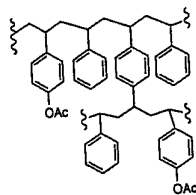


# Resins

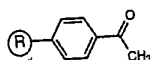
## Acetyloxypolystyrene resin



Acetyloxypolystyrene resin may be used as a polymer-supported acetylating reagent useful for preparing acetate esters from the corresponding alkoxides.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5090	0.5-1.5	100-200	1%	5 g	35.00
				25 g	140.00
				100 g	450.00

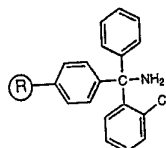
## Acetylpolystyrene resin



Acetylpolystyrene may be used as a nucleophile scavenger or as an anchor for diol substrates.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5040	1.0-1.5	100-200	1%	1 g	30.00
				5 g	120.00

## 2-Chlorotrityl amine resin



Useful as a solid phase aminating agent. Does not react with activated acids or acid halides.

See Technical Notes: Amino Trityl Resins, page 186.

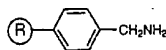
Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5065	1.0 - 2.5	100-200	1%	1 g	50.00
				5 g	200.00

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## Aminomethyl polystyrene



Aminomethyl polystyrene is a versatile resin with many applications. It is a commonly used base resin that is readily modified by coupling different linkers to it. It is also used as a scavenger resin in solution phase synthesis to remove excess electrophilic reagents. Recently, it was used to prepare secondary amines and substituted 2-aminoimidazolones.

Bull, S. D.; et al. *Chem. Commun.* **2000**, 337-338; Li, M.; Wilson, L. J. *Tetrahedron Lett.* **2001**, 42, 1455-1458.

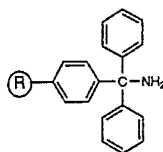
See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA4990*	0.7-1.5	35-45	1%	5 g	60.00
				25 g	250.00
SA5036	0.7-1.4	75-100	1%	5 g	55.00
				25 g	220.00
SA5002	0.7-1.4	100-200	1%	5 g	35.00
				25 g	130.00
				100 g	395.00
SA5003**	1.5-2.0	100-200	1%	5 g	55.00
				25 g	220.00
SA5001	0.1-0.6	100-200	1%	5 g	35.00
				25 g	130.00
				100 g	395.00
SA5004	0.7-1.4	200-400	1%	5 g	35.00
				25 g	130.00
				100 g	395.00

\*Large sized aminomethyl resin beads have been functionalized with triple branching dendrimers to produce an ultrahigh-loaded resin for preparing combinatorial libraries. Solvent changes should be made gradually to prevent solvent shock, which can cause the beads to shatter. Frommont, C.; Bradley, M. *Chem. Commun.* **2000**, 283-284.

\*\*High substitution aminomethyl resin is useful for scavenging acids, alkylating agents and other electrophiles in solution phase synthesis. For recent applications, see Baxendale, I. R.; Ley, S. V. *Bioorg. Med. Chem. Lett.* **2000**, 10, 1983-1986; Ley, S. V.; Massi, A. J. *Chem. Soc., Perkin Trans. 1* **2000**, 3645-3654; Shuttleworth, S. J.; et al. *Bioorg. Med. Chem. Lett.* **2000**, 10, 2501-2504.

## Trityl amine resin



An analog of amino-2-chlorotrityl resin. See Technical Notes: Amino Trityl Resins, page 186.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5005	1.5-2.5	100-200	1%	1 g	40.00
				5 g	150.00

Advanced ChemTech performs extensive quality testing on our resins, including:

Nitrogen Content

Loss on Drying

FTIR

Particle Size

Mesh Size

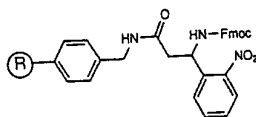
Swollen Volume

Dipeptide Content

Crosslinking

Kaiser Test

## ANP resin (Fmoc- $\beta$ -amino-2-nitrobenzylpropionamide resin)



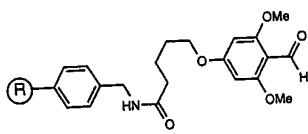
The ANP linker is photolabile, so amide substrates with acid-sensitive moieties can be cleaved under very mild conditions. In a typical cleavage, the resin is suspended in methanol/water and irradiated with 350 nm light.

Brown, B. mB.; Wagner, D. S.; Geysen, H. M. *Molecular Diversity* **1995**, 1, 4-12.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179; Photolysis from ANP Resin, page 192.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5077	0.8-1.5	100-200	1%	1 g	80.00
				5 g	320.00

## BAL resin (Backbone amide linker resin)



Backbone Amide Linker (BAL) resin is useful in combinatorial chemistry where it is used as a support for preparing diketopiperazines. BAL resin utilizes a unique strategy for linking peptides onto the resin. Instead of linking through the N-terminal or the C-terminal, the peptide is linked to the resin through one of the backbone amide moieties. This allows the peptide to be elaborated from either the N-terminus or the C-terminus. Some of the recent applications of this resin include the preparation of cyclic peptides, peptide alkylamides and preparation of peptide thioesters for native chemical ligation.

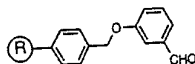
del Fresno, M.; et al. *Tetrahedron Lett.* **1998**, 39, 2639-2542; Jensen, K.J.; et al. *J.Am.Chem.Soc.* **1998**, 120, 5441-5452;

Alsina, J.; et al. *Tetrahedron Lett.* **2000**, 41, 7277-7280; Alsina, J.; et al. *J.Org.Chem.* **1999**, 64, 8761-8769.

See Technical Notes: Attaching Amines to Aldehyde Resins by Reductive Amination, page 179.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5070	0.6-1.2	100-200	1%	1 g	50.00
				5 g	200.00

## 3-Benzyloxybenzaldehyde resin



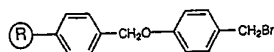
3-Benzyloxybenzaldehyde resin is anticipated to be useful in solution phase syntheses for removing excess nucleophilic reagents such as organometallic reagents, hydrazines, and ethane dithiol. A similar aldehyde resin was used to scavenge primary amines.

Creswell, M.W.; Bolton, G.L.; Hodges, J.C.; Meppen, M. *Tetrahedron* **1998**, 54, 3983-3998.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SB5007	0.6-1.0	100-200	1%	5 g	50.00
				25 g	195.00

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## 4-Benzyloxybenzyl bromide resin (Bromo Wang resin)



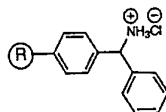
This resin has been used in solid phase synthesis as a support for carboxylic acids, amines and amides. Fmoc-protected amino acids can be attached via the Fmoc-amino acid cesium salt with little or no epimerization.

Miller, M. W.; Vice, S. F.; McCombie, S. W. *Tetrahedron Lett.* **1998**, 39, 3429-3432; Morales, G. A.; Corbett, J. W.; DeGrado, W. F. *J. Org. Chem.* **1998**, 63, 1172-1177; Ngu, K.; Patel, D. V. *Tetrahedron Lett.* **1997**, 38, 973-976; Jia, G.; Iida, H.; Lown, J. W. *Synlett* **2000**, 603-606.

See Technical Notes: Attachment of Carboxylic Acids to Halogenated Resins, page 177; Cleavage from Wang Resin, page 183.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5007	0.5-1.3	100-200	1%	5 g 25 g	45.00 175.00

## BHA resin (Benzhydrylamine resin)



These resins have been used to prepare amides and amines. Cleavage of the finished substrates requires strong acids such as trifluoromethane sulfonic acid or HF. Since these resins are stable to a wide range of acidic and basic conditions, they are also used as core resins.

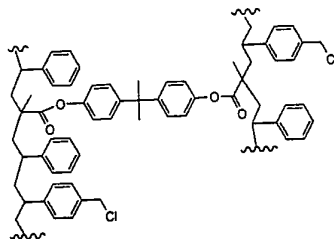
See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179; Standard HF Cleavage, page 182.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SB5003	0.7-1.4	100-200	1%	5 g 25 g	40.00 170.00
SB5005	1.5-2.0	100-200	1%	5 g 25 g	40.00 170.00
SB5004	0.1-0.6	100-200	1%	5 g 25 g	40.00 170.00
SB5023	0.7-1.4	200-400	1%	5 g 25 g	40.00 170.00
SB5025	1.5-2.0	200-400	1%	5 g 25 g	40.00 170.00
SB5024	0.1-0.6	200-400	1%	5 g 25 g	40.00 170.00
SB5014	0.7-1.4	100-200	2%	5 g 25 g	50.00 215.00
SB5017	0.1-0.6	200-400	2%	5 g 25 g	50.00 215.00

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## Bisphenol A Crosslinked Merrifield resin (BPA resin)

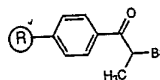


This new line of extended crosslinked resins is designed to provide larger pores to benefit large molecule synthesis and improve solvent and substrate penetration.

See Technical Notes: Attachment of Carboxylic Acids to Halogenated Resins, page 176; Standard HF Cleavage, page 182.

Cat. #	Subs. (mmol/g)	Mesh size	BPA crosslinking	Qty.	US \$
SC5093	1.0-2.0	100-200	3%	1 g	35.00
				5 g	140.00
SC5094	1.0-2.0	200-400	3%	1 g	35.00
				5 g	140.00

## Brominated Wang resin (photolabile)



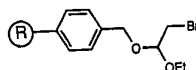
Wang developed this resin as a photolabile solid phase support for acids. Acid substrates are attached to the resin by using the corresponding cesium salt and are cleaved by photolysis with light at 350 nm. Using this resin, MALDI-MS characterization of substrates can be performed on a single resin bead without prior cleavage steps.

Wang, S. J. *Org. Chem.* **1976**, *41*, 3258-3261; Fitzgerald, M. C.; et al. *Bioorg. Med. Chem. Lett.* **1996**, *6*, 979-982.

See Technical Notes: Attachment of Carboxylic Acids to Halogenated Resins, page 176; Photolysis of Brominated Wang Resin Photolabile Resin, page 192.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5025	1.0-1.5	100-200	1%	1 g	35.00
				5 g	150.00

## Bromoacetal resin



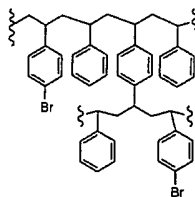
Bromoacetal resin is used to prepare combinatorial libraries of heterocyclic compounds containing the 1-acyl-3-oxopiperazine moiety.

Vojkovský, T.; Weichsel, A.; Pátek, M. *J. Org. Chem.* **1998**, *63*, 3162-3163; Eguchi, M.; et al. *J. Am. Chem. Soc.* **1999**, *121*, 12204-12205; Eguchi, M.; Lee, M. S.; Stasiak, M.; Kahn, M. *Tetrahedron Lett.* **2001**, *42*, 1237-1239.

See Technical Notes: Attaching Amines to Bromoacetal Resin, page 180; Cleaving Bromoacetal Resin, page 180.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SB5100	0.7-1.4	75-100	1%	1 g	35.00
				5 g	140.00
				25 g	560.00

## 4-Bromopolystyrene



Useful starting material for preparing derivatized polystyrenes as solid phase synthesis resins. This resin may be elaborated through palladium catalyzed coupling reactions or through conversion to lithiated polystyrene. Lithiated polystyrene generated from 4-bromopolystyrene is almost exclusively the 4-substituted isomer, whereas the material generated by direct lithiation of polystyrene is a mixture of isomers.

Farrall, M.J.; Fréchet, J.M.J. *J. Org. Chem.* **1976**, *41*, 3877-3882; Woolard, F.X.; et al. *J. Org. Chem.* **1997**, *62*, 6102-6103; Lee, Y.; Silverman, R.B. *J. Am. Chem. Soc.* **1999**, *121*, 8407-8408; Belogi, G.; Zhu, T.; Boons, G.-J. *Tetrahedron Lett.* **2000**, *41*, 6965-6968; Wang, B.; Chen, L.; Kim, K. *Tetrahedron Lett.* **2001**, *42*, 1463-1466.

See Technical Notes: Lithium-Bromine Exchange of Bromopolystyrene, page 192.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SP5090	1.0-1.8	100-200	1%	5 g	65.00
				25 g	265.00

## Carboxypolystyrene



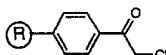
Carboxypolystyrene is a versatile resin that has recently been used as a scavenger for imidazole, a support for phenols and was the resin support in a recent synthesis of guanidines.

Schweitzer, B. A.; et al. *Bioorg. Med. Chem. Lett.* **1999**, *9*, 2053-2058; Barber, A. M.; et al. *Bioorg. Med. Chem. Lett.* **1999**, *9*, 623-626; Lee, C. Y.; Hanson, R. N. *Tetrahedron* **2000**, *56*, 1623-1629; Wilson, L. J.; Klopfenstein, S.; Li, M. *Tetrahedron Lett.* **1999**, *40*, 3999-4002.

See Technical Notes: Alcohol Coupling to Carboxypolystyrene, page 189.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5080	1.6-2.4	100-200	1%	1 g	40.00
				5 g	155.00
				25 g	320.00

## Chloroacetyl polystyrene

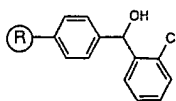


This resin is used for the solid phase synthesis of carboxylic acid compounds. Acids are attached to the resin by nucleophilic displacement of the chlorine with the cesium salt of the acid. Mild treatment of the resin with tetrabutylammonium fluoride or trimethyltin hydroxide releases the product.

See Technical Notes: Attachment of Carboxylic Acids to Halogenated Resins, page 177; Cleave Acids from Chloroacetylpolystyrene, page 190.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SP5022	2.5-5.0	100-200	1%	1 g	40.00
				5 g	155.00

## 2-Chlorodiphenylmethanol resin

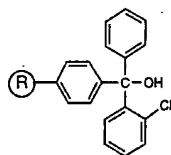


2-Chlorodiphenylmethanol resin is a less acid labile alternative to Rink acid resin for anchoring carboxylic acids and alcohols.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5060	1.0-2.0	100-200	1%	1 g	30.00
				5 g	110.00

## 2-Chlorotrityl alcohol resin



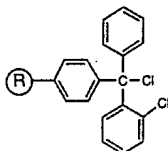
Easily converted to the activated 2-Cl-Trt chloride resin.

Orosz, G.; Kiss, L.P. *Tetrahedron Lett.* **1998**, 39, 3241-3242.

See Technical Notes: Activation of Trityl Alcohol Resins, page 177.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5057	1.0-2.6	100-200	1%	1 g	40.00
				5 g	165.00
				25 g	660.00

## 2-Chlorotrityl chloride resin

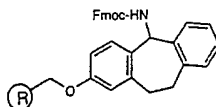


2-Chlorotrityl chloride resin is a highly acid labile resin useful in both solid phase organic chemistry and peptide synthesis. The steric bulk of the active site prevents diketopeptide formation in Pro C-terminal peptides and the mild cleavage conditions allow protected fragments to be prepared for convergent synthesis of larger molecules. It is highly recommended that this resin be re-activated before use to achieve the reported activity.

Highly Moisture Sensitive. Store refrigerated in a desiccator or under inert atmosphere.

See Technical Notes: Attachment of Carboxylic Acids to Trityl Chloride Resins, page 178; Attachment of Alcohols and Phenols to Trityl Chloride Resins, page 178; Attachment of Amines to Trityl Chloride Resins, page 180; Cleave Acids from Trityl Resins, page 185; Cleave Alcohols and Phenols from Trityl Resins, page 185.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5075	1.0-2.6	75-100	1%	1 g	35.00
				5 g	140.00
				25 g	490.00
SC5055	1.0-2.6	100-200	1%	1 g	35.00
				5 g	140.00
				25 g	490.00

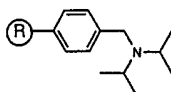
**DCHD resin**

This resin is useful for the solid phase synthesis of amides. Less sterically hindered than Rink resin, DCHD resin can be used to prepare sterically challenging amides. Recently, DCHD resin was used as a support for preparing peptide C-terminal semicarbazones and aldehydes.

Noda, M.; et al. *J. Org. Chem.* **1994**, *59*, 7968-7975; Patterson, J. A.; Ramage, R. *Tetrahedron Lett.* **1999**, *40*, 6121-6124.

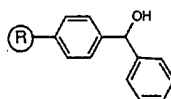
See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179; Cleavage from DCHD Resin, page 184.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5777	0.5-1.3	100-200	1%	1 g	60.00
				5 g	235.00

**Diisopropylaminomethylpolystyrene resin**

A resin-bound analog of Hunig's base, this resin is a good acid scavenger with low nucleophilicity.

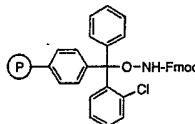
Cat. #	Mesh size	DVB crosslinking	Qty.	US \$
SA4970	100-200	1%	5 g	30.00
			25 g	120.00
			100 g	350.00

**Diphenylmethanol resin**

Diphenylmethanol resin is a less acid labile alternative to Rink acid resin for anchoring carboxylic acids and alcohols.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5227	0.3-2.0	100-200	1%	1 g	20.00
				5 g	80.00
SA5027	2.1-4.0	100-200	1%	1 g	25.00
				5 g	95.00

**Fmoc-Hydroxylamine-2-Chlorotrityl resin**

Resin for solid phase synthesis of hydroxamic acids which may have applications in treating cancer and rheumatoid arthritis.

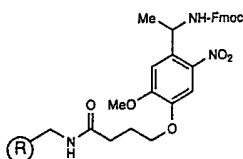
Khan, S. I.; Grinstaff, M. W. *Tetrahedron Lett.* **1998**, *39*, 8031-8034.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5059	0.7-1.5	100-200	1%	1 g	55.00
				5 g	220.00
				25 g	850.00



## Fmoc-Photolabile resin

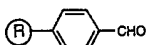


This photolabile resin has many applications in combinatorial chemistry for preparing amines, amides and lactams.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5078	0.6-1.0	100-200	1%	1 g	135.00
				5 g	540.00

## Formylpolystyrene



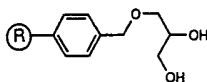
This aldehyde-functionalized polystyrene resin has been used as a solid phase support for primary amines and diols. It also has applications as a scavenger for primary amines.

Siegel, M.G.; et al. *Tetrahedron* **1999**, *55*, 11619-11639; Adrian, F.M.; et al. *Tetrahedron* **1998**, *54*, 3581-3588; Creswell, M.W.; et al. *Tetrahedron* **1998**, *54*, 3983-3998; Nicolaou, K.C.; et al. *Angew. Chem. Int. Ed. Engl.* **1998**, *37*, 2534-2537.

See Technical Notes: Attaching Amines to Aldehyde Resins by Reductive Amination, page 179.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SP5007	0.7-1.5	100-200	1%	5 g	40.00
				25 g	160.00

## Glycerol resin



Glycerol resin is a useful solid phase support for aldehydes and ketones. It was recently used to anchor indolyl moieties through an N-formyl linker.

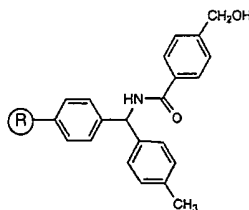
Maltais, R.; et al. *Tetrahedron Lett.* **2000**, *41*, 1691-1694; Kraxner, J.; Arlt, M.; Gmeiner, P. *Synlett* **2000**, 125-127.

See Technical Notes: Glycerol Resin, page 188.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5760	0.6-1.0	100-200	1%	1 g	15.00
				5 g	60.00
				25 g	240.00

RESINS

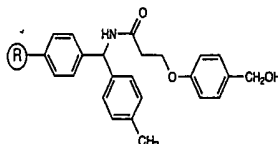
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**HMBA-MBHA resin****(4-(Hydroxymethyl)benzoic acid-4-methylbenzhydramide resin)**

Products can be cleaved from this resin by a variety of nucleophiles. In peptide synthesis, HMBA-MBHA resin has proven useful for preparing cyclic peptides synthesizing large peptides by fragment condensation.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Cleavage from HMBA-MBHA Resin, page 187.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5015	0.7-1.3	100-200	1%	1 g	40.00
				5 g	160.00

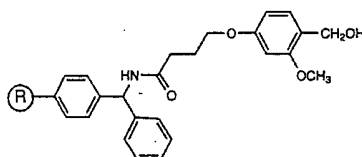
**HMPA resin (4-(Hydroxymethyl)phenoxyacetamide resin)**

HMPA resin is primarily used as a solid support for carboxylic acids. It is somewhat less acid labile than Wang resin. HMPA resin was used in a recent solid phase synthesis of sulfahydantoins.

Albericio, F.; et al. *Tetrahedron Lett.* **2000**, 41, 3161-3163.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Mitsunobu Coupling to Hydroxy-Substituted Resins, page 178; Cleavage from HMPA Resin, page 183.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5090	0.7-1.3	100-200	1%	1 g	35.00
				5 g	135.00

**HMPB-BHA resin****(4-[4-(Hydroxymethyl)3-methoxyphenoxy]butyric acid-benzhydramide resin)**

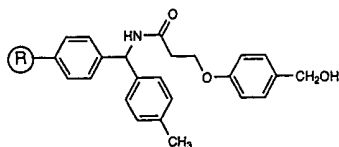
For anchoring phenols by Mitsunobu coupling, HMPB resin proved superior to other resins with benzyl-type linkers.

Cabrele, C.; Langer, M.; Beck-Sickinger, A. G. *J. Org. Chem.* **1999**, 64, 4353-4361.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Mitsunobu Coupling to Hydroxy-Substituted Resins, page 178; Cleavage from HMPB Resin, page 184.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SB5040	0.7-1.3	100-200	1%	1 g	40.00
				5 g	160.00

## HMPPA-MBHA resin (3-[4(Hydroxymethyl)phenoxy]propionamide resin)



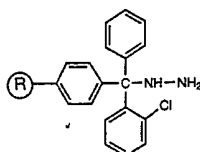
This resin is used to support acids in solid phase synthesis. It has acid lability similar to Wang resin, but the longer linker offers greater steric freedom.

Albericio, F.; Barany, G. *Int. J. Peptide Protein Res.* **1985**, *26*, 92-97.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Cleavage from HMPPA Resin, page 184.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5022	0.7-1.3	100-200	1%	1 g	30.00
				5 g	145.00

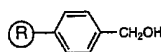
## Hydrazine 2-Chlorotrityl resin



Useful as a solid phase hydrazine source.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5084	1.0-1.5	100-200	1%	1 g	50.00
				5 g	200.00

## Hydroxymethyl polystyrene resin

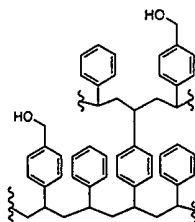


Hydroxymethyl polystyrene resin may be used as an alternative to Merrifield resin for anchoring carboxylic acids. Acids can be coupled to this resin by means of the corresponding acid anhydride, by carbodiimide activation or by Mitsunobu coupling.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Cleavage from Merrifield Resin, page 181.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5039	0.7-1.4	75-100	1%	5 g	40.00
				25 g	155.00
				100 g	445.00
SA5032	1.5-2.5	75-100	1%	5 g	40.00
				25 g	155.00
				100 g	445.00
SA5020	0.7-1.2	100-200	1%	5 g	30.00
				25 g	115.00
				100 g	345.00
SA5024	1.3-2.5	100-200	1%	5 g	40.00
				25 g	155.00
				100 g	445.00
SA5029	0.7-1.2	200-400	1%	5 g	30.00
				25 g	115.00
				100 g	345.00

## ParaMax hydroxymethyl resin (98% para)

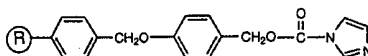


Standard hydroxymethyl resin typically has a 70:30 mixture of para and meta hydroxymethyl substituents. ParaMax hydroxymethyl resin, in contrast, has up to 98% para substituent. The structural homogeneity of ParaMax resins results in more uniform reaction kinetics and easier on-bead spectral monitoring of reactions. Additionally, ParaMax resins exhibit larger swelling factors than standard resins, allowing faster, more complete reactions.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Cleavage from Merrifield Resin, page 181.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5034	1.3-2.5	100-200	1%	5 g	40.00
				25 g	165.00

## Imidazole carbonate resin



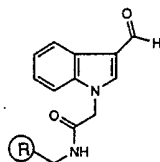
The imidazole carbonate linker is useful for anchoring primary amines and for preparing carboxylic acids with Grignard reagents.

Rotella, D.P. *J. Am. Chem. Soc.* **1996**, *118*, 12246-12247; Hauske, J. R.; Dorff, P. *Tetrahedron Lett.* **1995**, *36*, 1589-1592.

See Technical Notes: Attaching Amines to Nitrophenyl Carbonate Resin, Succinimidyl Carbonate Resin and Imidazole Carbonate Resin, page 180; Cleavage of Amines from Carbamate Resin, page 189.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5097	0.7-1.4	100-200	1%	1 g	35.00
				5 g	125.00
				25 g	500.00

## Indole resin



Solid phase synthesis support useful for preparing amine derivatives such as amides, ureas, sulfonamides and guanidines from primary amides.

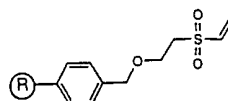
Estep, K.G.; et al. *J. Org. Chem.* **1998**, *63*, 5300-5301.

See Technical Notes: Indole Resin, page 179.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5775	0.1-0.6	100-200	1%	1 g	35.00
				5 g	130.00
				25 g	520.00



## Linear Vinyl Sulfone resin



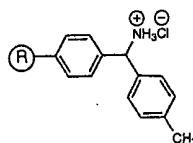
This resin is used as a support for the solid phase synthesis of tertiary amines.

Heinonen, P.; Lönnberg, H. *Tetrahedron Lett.* **1997**, *38*, 8569-8572.

See Technical Notes: Attaching Amines to REM Resin and Linear Vinyl Sulfone Resin; Cleavage from REM Resin and Linear Vinyl Sulfone Resin, page 188.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5071	0.4-1.2	100-200	1%	1 g	45.00
				5 g	120.00

## MBHA resin (4-Methylbenzhydrylamine resin)



4-Methylbenzhydrylamine resins can be cleaved more easily than benzhydrylamine resins; as a result 4-methylbenzhydrylamine resins have been used more often in the synthesis of amides and amines. Although these resins are more labile, strong acids are still required to effect cleavage of the substrates. 4-Methylbenzhydrylamine resins are sufficiently stable to be used as core resins with a variety of resin linkers to produce new resins.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179; Standard HF Cleavage, page 182.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5010	0.7-1.4	100-200	1%	5 g	40.00
				25 g	170.00
SA5021	1.5-2.0	100-200	1%	5 g	40.00
				25 g	170.00
SA5014	0.1-0.6	100-200	1%	5 g	40.00
				25 g	170.00
SA5017	0.7-1.4	200-400	1%	5 g	40.00
				25 g	170.00
SA5019	1.5-2.0	200-400	1%	5 g	40.00
				25 g	170.00
SA5018	0.1-0.6	200-400	1%	5 g	40.00
				25 g	170.00
SA5111	0.7-1.4	200-400	2%	5 g	60.00
				25 g	220.00
SA5112	0.1-0.6	200-400	2%	5 g	60.00
				25 g	220.00

See Page 143 for Amino Acid Substituted MBHA Resins

## Merrifield Resin



Merrifield resin may be used as a support for solid phase synthesis or can be elaborated by attaching various linkers to produce new resins with unique properties. Carboxylic acids, alcohols, amines and phenols can be attached to Merrifield resin by nucleophilic displacement of chlorine.

See Technical Notes: Attachment of Carboxylic Acids to Halogenated Resins, page 177; Cleavage from Merrifield Resin, page 181.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5021	0.9-1.5	60-75	1%	25 g	100.00
				100 g	250.00
SC5051	0.8-1.5	70-90	1%	25 g	65.00
				100 g	200.00
SC5018	0.9-1.5	75-100	1%	25 g	50.00
				100 g	140.00
SC5004	0.9-1.5	100-200	1%	25 g	50.00
				100 g	140.00
SC5002	0.2-0.6	100-200	1%	25 g	50.00
				100 g	140.00
SC5007*	2.0-5.0	100-200	1%	25 g	70.00
				100 g	215.00
SC5014	0.9-1.5	200-400	1%	25 g	55.00
				100 g	160.00
SC5016	2.0-5.0	200-400	1%	25 g	70.00
				100 g	225.00
SC5012	0.2-0.6	200-400	1%	25 g	50.00
				100 g	140.00
SC5024	0.9-1.5	100-200	2%	25 g	50.00
				100 g	140.00
SC5025**	2.0-5.0	100-200	2%	25 g	70.00
				100 g	215.00
SC5035	2.0-5.0	200-400	2%	25 g	70.00
				100 g	225.00

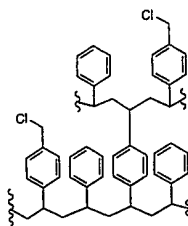
\*This high substitution resin is useful for scaling up solid-phase chemistry to produce up to 100 g quantities of small molecule products. Raillard, S. P.; Ji, G.; Mann, A. D.; Baer, A. *Organic Process Research & Development* **1999**, 3, 177-183.

\*\*This resin is very useful for preparing polymer-supported reagents, such as isothiurea resins. Yang, R.-Y.; Kaplan, A. *Tetrahedron Lett.* **2000**, 41, 7005-7008; Yang, R.-Y.; Kaplan, A.P. *Tetrahedron Lett.* **2001**, 42, 4433-4435.

See Page 144 for Boc-Amino Acid Merrifield Resins  
For Fmoc-Amino Acid Merrifield Resins, see page 147

RESINS

## ParaMax Merrifield resin



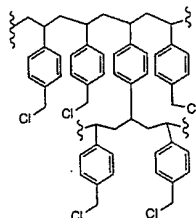
Standard Merrifield resin typically has a 70:30 mixture of para and meta chloromethyl substituents. ParaMax Merrifield resin, in contrast, has up to 98% para substituent. The structural homogeneity of ParaMax Merrifield resin results in more uniform reaction kinetics and easier on-bead spectral monitoring of reactions. Additionally, ParaMax Merrifield resins exhibit larger swelling factors than standard Merrifield resin, allowing faster, more complete reactions.

See Technical Notes: Attachment of Carboxylic Acids to Halogenated Resins, page 177; Cleavage from Merrifield Resin, page 181.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5006	0.8-1.5	100-200	1%	5 g	18.00
				25 g	72.00
SC5042	0.8-1.5	100-200	2%	5 g	18.00
				25 g	72.00
SC5048	0.8-1.5	100-200	3%	5 g	18.00
				25 g	72.00
SC5044	0.8-1.5	100-200	4%	5 g	18.00
				25 g	72.00
SC5008	0.8-1.5	200-400	1%	5 g	18.00
				25 g	72.00
SC5043	0.8-1.5	200-400	2%	5 g	18.00
				25 g	72.00
SC5046	0.8-1.5	200-400	3%	5 g	18.00
				25 g	72.00
SC5049	0.8-1.5	200-400	4%	5 g	18.00
				25 g	72.00

RESINS

## Ultrasubstituted Merrifield resin



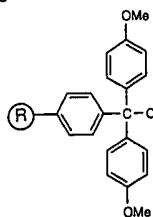
High substitution Merrifield resin is a useful scavenger of triphenylphosphine and triphenylphosphine oxide.

Lipshutz, B.H.; Blomgren, P.A. *Organic Letters* 2001, 3, 1869-1871.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SP5010	5.9	100-200	1%	5 g	25.00
				25 g	100.00
				100 g	295.00



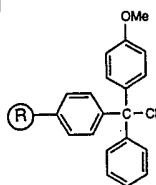
## Dimethoxytrityl chloride resin



This resin is based on the dimethoxytrityl (Dmt) protecting group used in oligonucleotide synthesis. This product is anticipated to be useful in oligonucleotide synthesis and as a capture resin.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SD4100		100-200	1%	1 g	60.00
				5 g	240.00
				25 g	960.00

## 4-Methoxytrityl chloride resin



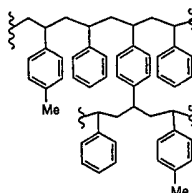
Imidazoles can be attached to this resin in high yield and can be cleaved with 1% TFA.

Eleftheriou, S.; Gatos, D.; Panagopoulos, A.; Stathopoulos, S.; Barlos, K. *Tetrahedron Lett.* **1999**, 40, 2825-2828.

See Technical Notes: Attachment of Amines to Trityl Chloride Resins, page 180; Attachment of Alcohols and Phenols to Trityl Chloride Resins, page 178; Cleave Alcohols and Phenols from Trityl Resins, page 185.

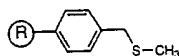
Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5086	1.0-2.0	100-200	1%	1 g	40.00
				5 g	150.00

## 4-Methylpolystyrene (4-Mepolystyrene)



Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SP5096	1.0-1.5	75-100	1%	5 g	20.00
				25 g	80.00
SP5095	1.0-1.5	100-200	1%	5 g	20.00
				25 g	80.00

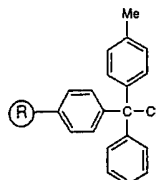
## S-(Methyl)thiomethyl polystyrene resin



This resin has potential applications as a scavenger for oxidizing agents and carbocations, as occur in peptide deprotection-cleavage reactions.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5778	0.5-1.3	100-200	1%	5 g	60.00
				25 g	240.00
				100 g	595.00

## 4-Methyltrityl chloride resin



Acid labile resin useful for supporting amines and imidazoles in solid phase synthesis.

Eleftheriou, S.; et al. *Tetrahedron Lett.* **1999**, 40, 2825-2828.

Moisture Sensitive. Store refrigerated in a desiccator or under inert atmosphere.

See Technical Notes: Attachment of Amines to Trityl Chloride Resins, page 180; Attachment of Alcohols and Phenols to Trityl Chloride Resins, page 178; Cleave Alcohols and Phenols from Trityl Resins, page 185.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5058	1.0-2.0	100-200	1%	1 g	50.00
				5 g	200.00

## Morpholinomethyl polystyrene resin

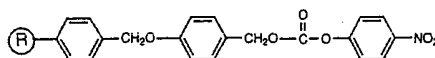


This resin can be easily converted to the corresponding polymer-bound N-oxide, which is an efficient promoter of the Pauson-Khand reaction. In addition, morpholinomethylpolystyrene is a useful polymer-supported base and scavenger resin for acids and alkyl halides.

Brown, D.S.; et al. *Synlett* **2000**, 1573-1576; Blackburn, C.; et al. *Tetrahedron Lett.* **1998**, 39, 3635-3638; Creswell, M. W.; Bolton, G. L.; Hodges, J. C.; Meppen, M. *Tetrahedron* **1998**, 54, 3983-3998; Ryder, T. R.; et al. *Bioorg. Med. Chem. Lett.* **1999**, 9, 1813-1818.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA4830	0.8-1.5	60-75	1%	5 g	30.00
				25 g	110.00
				100 g	320.00

## 4-Nitrophenyl carbonate resin



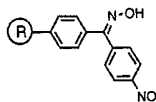
This resin is a popular solid phase support for primary amines. It was recently used to support indoles by attachment through the indole nitrogen.

Smith, A. L.; et al. *Bioorg. Med. Chem. Lett.* **2000**, 10, 2693-2696.

See Technical Notes: Attaching Amines to Nitrophenyl Carbonate Resin, Succinimidyl Carbonate Resin and Imidazole Carbonate Resin, page 180; Cleavage of Amines from Carbamate Resin, page 189.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5052	0.7-1.5	100-200	1%	1 g	50.00
				5 g	195.00
				25 g	780.00

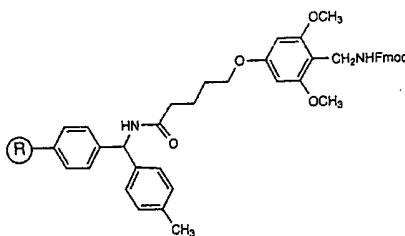
## Oxime resin



See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Oxime Resin, page 186.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5035	0.5-1.1	100-200	1%	1 g	40.00
				5 g	155.00

## PAL resin

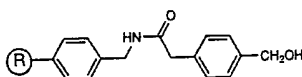


PAL resin is an acid labile resin originally developed for the synthesis of peptide amides by Fmoc chemistry that has also been used in combinatorial chemistry to prepare amides and amines. In comparison to Knorr resin, PAL resin is approximately two times as reactive towards cleavage.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179; Cleavage from PAL Resin, page 184.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5075	0.4-0.8	100-200	1%	1 g	100.00
				5 g	400.00

## PAM resin



PAM resin has greater acid stability than Merrifield resin, making it suitable for synthesizing medium and large peptides by Boc methodology.

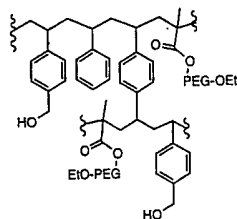
See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Standard HF Cleavage, page 182.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5050	0.7-1.3	100-200	1%	1 g	50.00
				5 g	175.00
				25 g	700.00

RESINS

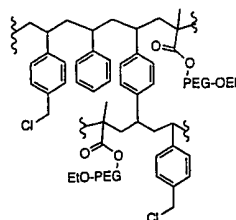
See Page 145 for Amino Acid Substituted PAM Resins

## PEG-co-Hydroxymethylpolystyrene resin



See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Standard HF Cleavage, page 182.

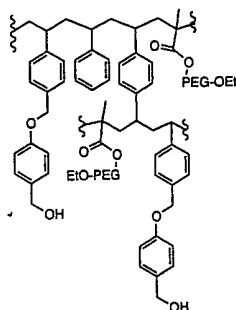
Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC7150	0.8-1.5	100-200	1%	1 g	35.00
				5 g	130.00
				25 g	520.00

**PEG-co-Merrifield resin**

PEG-co-Merrifield resin incorporates polyethylene glycol (PEG) moieties onto the polymer backbone adjacent to the reactive sites. The environmental effects of the PEG improve resin swelling and reactive site solvation in protic solvents.

See Technical Notes: Attachment of Carboxylic Acids to Halogenated Resins, page 176; Standard HF Cleavage, page 182.

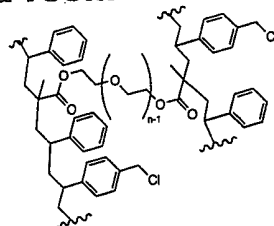
Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5110	0.8-1.5	100-200	1%	1 g	25.00
				5 g	100.00
				25 g	395.00

**PEG-co-Wang resin**

PEG-co-Wang resin incorporates polyethylene glycol (PEG) moieties onto the polymer backbone adjacent to the reactive sites. The environmental effects of the PEG improve resin swelling and reactive site solvation in protic solvents.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Cleavage from Wang Resin, page 183.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5170	0.5-1.3	100-200	1%	1 g	35.00
				5 g	140.00
				25 g	550.00

**PEG Crosslinked Merrifield resin**

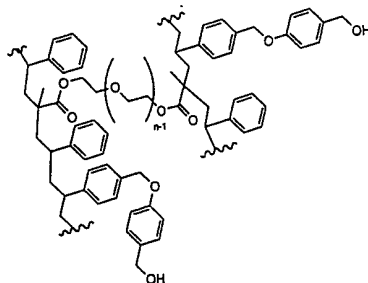
These new resins incorporate polyethylene glycol crosslinks into the core matrix, which reduces the hydrophobicity of the resin and allows for improved swelling in protic solvents. The different length crosslinkers result in different sized pores.

See Technical Notes: Attachment of Carboxylic Acids to Halogenated Resins 176; Standard HF Cleavage, page 182.

Cat. #	Subs. (mmol/g)	Mesh size	PEG crosslinker	Qty.	US \$
SC5112	0.8-1.5	100-200	n=16	1 g	25.00
				5 g	100.00
SC5113	0.8-1.5	100-200	n=9	1 g	25.00
				5 g	100.00
SC5114*	0.8-1.5	100-200	n=4	1 g	25.00
				5 g	100.00

\*This resin swells in both polar and non-polar solvents. The swollen form allows faster delivery of reactants to all active sites of resin, enhancing reaction kinetics. In addition, modification of the reactive sites does not alter the swelling properties of the resin. These properties combine to make this a superior resin for preparing medium to large peptides. Kumar, K. S.; Pillai, V. N. R. *Tetrahedron* 1999, 55, 10437-10446; Kumar, K.S.; Pillai, V.N.R.; Das, M.R. *J. Peptide Res.* 2000, 56, 88-96.

## PEG Crosslinked Wang resin

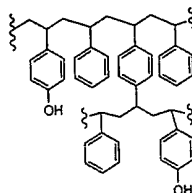


These new resins incorporate polyethylene glycol crosslinks into the core matrix, which reduces the hydrophobicity of the resin and allows for improved swelling in protic solvents. The different length crosslinkers result in different sized pores.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Cleavage from Wang Resin, page 183.

Cat. #	Subs. (mmol/g)	Mesh size	PEG crosslinker	Qty.	US \$
SA5172	0.8-1.5	100-200	n=16	1 g	35.00
				5 g	140.00
				25 g	550.00
SA5173	0.8-1.5	100-200	n=9	1 g	35.00
				5 g	140.00
				25 g	550.00
SA5174	0.8-1.5	100-200	n=4	1 g	35.00
				5 g	140.00
				25 g	550.00

## Phenol resin



Acids attached to phenol resin can be cleaved by hydrazine to produce hydrazides or with 2-dimethylaminoethanol to form the corresponding transesterification products. Additionally, phenol resin may be used as a carbonium ion scavenger resin in solution phase deprotection of t-butyl based protecting groups.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Phenol Resin, page 187.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5097	0.5-1.5	100-200	1%	5 g	35.00
				25 g	140.00

## Piperidinomethyl polystyrene resin

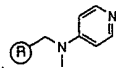


This polymer-supported analog of N-methylpiperidine is used as a base reagent and acid scavenger. It may also have application as a scavenger of alkylating reagents.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA4820	2.0-3.0	100-200	1%	5 g	35.00
				25 g	135.00
				100 g	400.00

RESINS

## Poly-DMAP resin

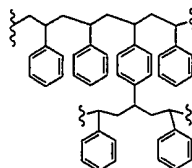


Poly-DMAP resin is a polymer supported strong base used as an acid scavenger and acylation catalyst. It was also used to prepare polymer-supported Rh-amine catalysts for chemoselective transfer hydrogenation.

Habermann, J.; Ley, S.V.; Scott, J.S. *J.Chem.Soc., Perkin Trans.1* **1998**, 3127-3130; Parlow, J.J.; Flynn, D.L. *Tetrahedron* **1999**, 54, 4013-4031; Mizugaki, T.; Kanayama, Y.; Ebitani, K.; Kaneda, K. *J.Org.Chem.* **1998**, 63, 2378-2381.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5085	0.9-2.0	100-200	1%	5 g	30.00
				25 g	125.00
				100 g	375.00

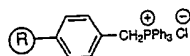
## Polystyrene



Polystyrene is the base for preparing a wide variety of resins for combinatorial chemistry and peptide synthesis. Electrophilic aromatic substitution yields analogs of benzyl amine, benzyl chloride, benzyl ethers and other benzyl derivatives. Friedel-Crafts acylation produces polymeric ketones. Lithiation produces a polymeric phenyllithium reagent that reacts with carbon dioxide, sulfur and diphenylphosphorus chloride to give the polymeric analogs of benzoic acid, thiophenol and triphenylphosphine, respectively. All of these products, in turn, can be utilized in further reactions to produce the common resin supports plus many new resins with novel properties and uses.

Cat. #	Mesh size	DVB crosslinking	Qty.	US \$
SP5070	35-45	1%	25 g	140.00
			100 g	495.00
SP5004	75-100	1%	25 g	90.00
			100 g	270.00
SP5009	100-200	1%	25 g	40.00
			100 g	115.00
SP5008	200-400	1%	25 g	40.00
			100 g	115.00
SP5019	100-200	2%	25 g	40.00
			100 g	115.00
SP5018	200-400	2%	25 g	40.00
			100 g	115.00
SP5042	100-150	1%	25 g	100.00
			100 g	300.00
SP5044	120-170	1%	25 g	100.00
			100 g	300.00
SP5046	135-185	1%	25 g	100.00
			100 g	300.00
SP5048	150-200	1%	25 g	100.00
			100 g	300.00
SP5049	150-300	1%	25 g	100.00
			100 g	300.00
SP5056	170-230	1%	25 g	100.00
			100 g	300.00
SP5054	170-270	1%	25 g	100.00
			100 g	300.00
SP5058	200-300	1%	25 g	100.00
			100 g	300.00

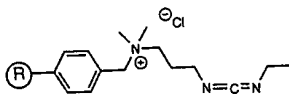
## Polystyrene-CH<sub>2</sub>PPh<sub>3</sub><sup>+</sup> Cl<sup>-</sup>



This polymer-bound Wittig reagent is useful for preparing vinylogous polystyrene resins.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SP5028	0.7-1.3	100-200	1%	1 g	40.00
				5 g	160.00
				25 g	615.00

## Polystyrene-EDC

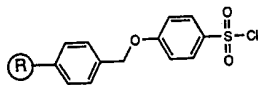


This resin-supported carbodiimide is convenient in solution phase synthesis.

For recent applications see Henlin, J.M. et al. *J. Pept. Res.* 2001, 57, 417-427.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SP5005	0.5-1.0	100-200	1%	1 g	70.00
				5 g	280.00

## Polystyrenesulfonyl chloride resin



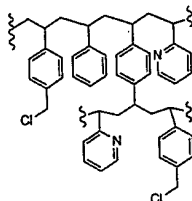
This resin may be used to convert alcohols to amines or as a traceless solid phase support for aryl compounds. It was recently used to prepare polymer-supported chiral auxiliaries for the asymmetric reduction of ketones.

Rueter, J. K.; Nortey, S. O.; Baxter, E. W.; Leo, G. C.; Reitz, A. B. *Tetrahedron Lett.* 1998, 39, 975-978; Jin, S.; Holub, D. P.; Wustrow, D. J. *Tetrahedron Lett.* 1998, 39, 3651-3654; Altava, B.; et al. *Tetrahedron Lett.* 2001, 42, 1673-1675.

See Technical Notes: Polystyrenesulfonyl Chloride Resin

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5095	0.5-1.3	100-200	1%	5 g	65.00
				25 g	260.00

## 2-Pyridine-Co-Merrifield resin



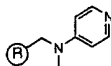
2-Pyridine-Co-Merrifield resin and 2-Pyridine-Co-Wang resin have superior swelling characteristics. With these resins, difficult peptides are prepared higher purity and better yield than on conventional resins.

See Technical Notes: Attachment of Carboxylic Acids to Halogenated Resins, page 177; Standard HF Cleavage, page 182.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5710	0.5-1.3	100-200	1%	1 g	35.00
				5 g	140.00

RESINS

## Poly-DMAP resin

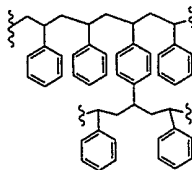


Poly-DMAP resin is a polymer supported strong base used as an acid scavenger and acylation catalyst. It was also used to prepare polymer-supported Rh-amine catalysts for chemoselective transfer hydrogenation.

Habermann, J.; Ley, S.V.; Scott, J.S. *J.Chem.Soc., Perkin Trans. 1* **1998**, 3127-3130; Parlow, J.J.; Flynn, D.L. *Tetrahedron* **1999**, 54, 4013-4031; Mizugaki, T.; Kanayama, Y.; Ebitani, K.; Kaneda, K. *J.Org.Chem.* **1998**, 63, 2378-2381.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5085	0.9-2.0	100-200	1%	5 g	30.00
				25 g	125.00
				100 g	375.00

## Polystyrene

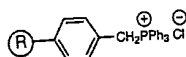


Polystyrene is the base for preparing a wide variety of resins for combinatorial chemistry and peptide synthesis. Electrophilic aromatic substitution yields analogs of benzyl amine, benzyl chloride, benzyl ethers and other benzyl derivatives. Friedel-Crafts acylation produces polymeric ketones. Lithiation produces a polymeric phenyllithium reagent that reacts with carbon dioxide, sulfur and diphenylphosphorus chloride to give the polymeric analogs of benzoic acid, thiophenol and triphenylphosphine, respectively. All of these products, in turn, can be utilized in further reactions to produce the common resin supports plus many new resins with novel properties and uses.

Cat. #	Mesh size	DVB crosslinking	Qty.	US \$
SP5070	35-45	1%	25 g	140.00
			100 g	495.00
SP5004	75-100	1%	25 g	90.00
			100 g	270.00
SP5009	100-200	1%	25 g	40.00
			100 g	115.00
SP5008	200-400	1%	25 g	40.00
			100 g	115.00
SP5019	100-200	2%	25 g	40.00
			100 g	115.00
SP5018	200-400	2%	25 g	40.00
			100 g	115.00
SP5042	100-150	1%	25 g	100.00
			100 g	300.00
SP5044	120-170	1%	25 g	100.00
			100 g	300.00
SP5046	135-185	1%	25 g	100.00
			100 g	300.00
SP5048	150-200	1%	25 g	100.00
			100 g	300.00
SP5049	150-300	1%	25 g	100.00
			100 g	300.00
SP5056	170-230	1%	25 g	100.00
			100 g	300.00
SP5054	170-270	1%	25 g	100.00
			100 g	300.00
SP5058	200-300	1%	25 g	100.00
			100 g	300.00



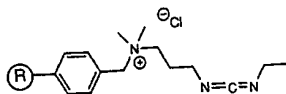
## Polystyrene-CH<sub>2</sub>PPh<sub>3</sub><sup>+</sup> Cl<sup>-</sup>



This polymer-bound Wittig reagent is useful for preparing vinylous polystyrene resins.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SP5028	0.7-1.3	100-200	1%	1 g	40.00
				5 g	160.00
				25 g	615.00

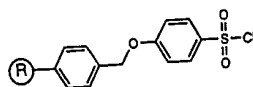
## Polystyrene-EDC



This resin-supported carbodiimide is convenient in solution phase synthesis.  
For recent applications see Henlin, J.M. et al. *J. Pept. Res.* **2001**, 57, 417-427.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SP5005	0.5-1.0	100-200	1%	1 g	70.00
				5 g	280.00

## Polystyrenesulfonyl chloride resin



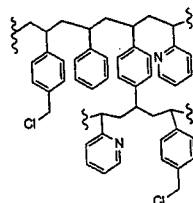
This resin may be used to convert alcohols to amines or as a traceless solid phase support for aryl compounds. It was recently used to prepare polymer-supported chiral auxiliaries for the asymmetric reduction of ketones.

Rueter, J. K.; Nortey, S. O.; Baxter, E. W.; Leo, G. C.; Reitz, A. B. *Tetrahedron Lett.* **1998**, 39, 975-978; Jin, S.; Holub, D. P.; Wustrow, D. J. *Tetrahedron Lett.* **1998**, 39, 3651-3654; Altava, B.; et al. *Tetrahedron Lett.* **2001**, 42, 1673-1675.

See Technical Notes: Polystyrenesulfonyl Chloride Resin

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5095	0.5-1.3	100-200	1%	5 g	65.00
				25 g	260.00

## 2-Pyridine-Co-Merrifield resin



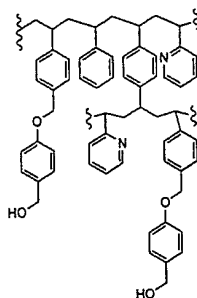
2-Pyridine-Co-Merrifield resin and 2-Pyridine-Co-Wang resin have superior swelling characteristics. With these resins, difficult peptides are prepared higher purity and better yield than on conventional resins.

See Technical Notes: Attachment of Carboxylic Acids to Halogenated Resins, page 177; Standard HF Cleavage, page 182.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5710	0.5-1.3	100-200	1%	1 g	35.00
				5 g	140.00

RESINS

## 2-Pyridine-Co-Wang resin



See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Cleavage from Wang Resin, page 183.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5780	0.4-0.9	100-200	1%	1 g	50.00
				5 g	195.00

## ReACTagel-Br resin

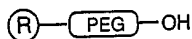


ReACTagel resins are high loaded 1% DVB-crosslinked polystyrene beads grafted with polyethyleneglycol (PEG). The grafted PEG makes these resins very useful in protic solvents such as ethanol, methanol and water. The PEG-polystyrene linkage is stable to acids, allowing these resins to be used in a wide variety of synthesis applications.

See Technical Notes: Attachment of Carboxylic Acids to Halogenated Resins, page 177.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA8150	0.7-1.3	100-200	1%	1 g	25.00
				5 g	95.00

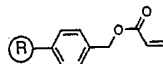
## ReACTagel-OH resin



See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA8010	0.7-1.3	100-200	1%	1 g	35.00
				5 g	135.00

## REM resin

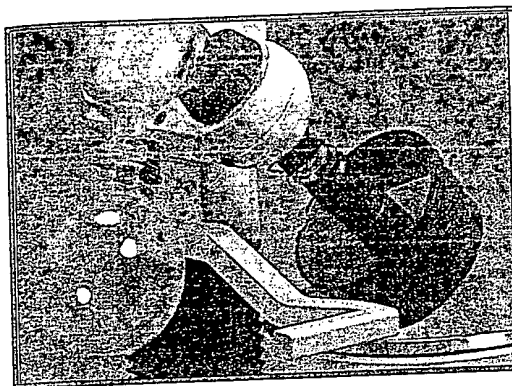


REM resin is used to prepare tertiary amines. Primary and secondary amines are loaded onto the resin by Michael addition, alkylated and the resulting tertiary amine products are released by Hoffman elimination. REM resin is also used to prepare cyclic products by Diels-Alder and 1,3-dipolar addition reactions.

Morphy, J.R.; et al. *Tetrahedron Lett.* **1996**, 37, 3209-3212; Brown, A.R.; et al. *J. Am. Chem. Soc.* **1997**, 119, 3288-3295; Caix-Haumesser, S.; et al. *Tetrahedron Lett.* **2001**, 42, 3721-3723; Winkler, J. D.; Kwak, Y.-S. *J. Org. Chem.* **1998**, 63, 8634-8635; Caix-Haumesser, S.; et al. *Tetrahedron Lett.* **2001**, 42, 3721-3723.

See Technical Notes: Attaching Amines to REM Resin and Linear Vinyl Sulfone Resin, page 179; Cleavage from REM Resin and Linear Vinyl Sulfone Resin, page 188.

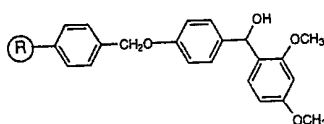
Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5048	0.6-1.0	100-200	1%	1 g	25.00
				5 g	100.00



## ACTEvap The Economical Way to Simplify Sample Preparation

- Evaporates up to 35 vials simultaneously
- Fits on standard laboratory rotary evaporation units
- Patent-pending design virtually eliminates liquid bumping

### Rink Acid Resin

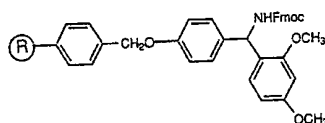


Rink acid resin is a highly acid labile resin that can be cleaved under conditions as mild as 10% acetic acid.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Cleavage from Rink Acid Resin, page 184.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5045	0.7-1.3	100-200	1%	1 g	35.00
				5 g	135.00
				25 g	540.00

### Rink resin



Rink resin is an acid labile resin widely used to prepare amides and sulfonamides.

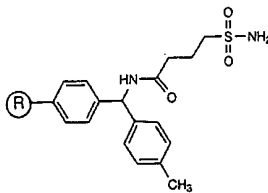
Rink, H. *Tetrahedron Lett.* **1987**, 28, 3787-3790; Brown, E.G.; Nuss, J.M. *Tetrahedron Lett.* **1997**, 38, 8457-8460;  
Pons, J.-F.; Mishir, Q.; Nouvet, A.; Brookfield, F. *Tetrahedron Lett.* **2000**, 41, 4965-4968.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179; Cleavage from Rink and Knorr Resin, page 184.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5125	0.4-0.8	75-100	1%	1 g	40.00
				5 g	160.00
				25 g	540.00
SA5030	0.4-0.8	100-200	1%	1 g	40.00
				5 g	160.00
				25 g	540.00
SA5031	0.9-1.5	100-200	1%	1 g	50.00
				5 g	175.00
				25 g	700.00
SA5013	0.1-0.3	100-200	1%	1 g	40.00
				5 g	160.00
				25 g	540.00
SA5130	0.4-0.8	200-400	1%	1 g	40.00
				5 g	160.00
				25 g	540.00

RESINS

## Safety catch resin, aliphatic



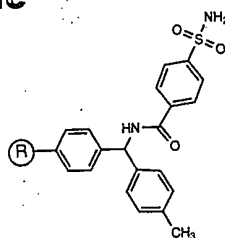
An alternative version of Kenner's safety-catch resin (SA5755) which allows for more facile release of products, this resin has proved useful in preparing peptide thioesters used in protein synthesis by native chemical ligation.

Backes, B. J.; Virgilio, A. A.; Ellman, J. A. *J. Am. Chem. Soc.* **1996**, *118*, 3055-3056; Ingenito, R.; Bianchi, E.; Fattori, D.; Pessi, A. *J. Am. Chem. Soc.* **1999**, *121*, 11369-11374.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179; Activation and Cleavage of Safety Catch Resins, page 187.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	1 g	US \$
SA5758	0.7-1.3	100-200	1%	1 g	75.00
				5 g	300.00

## Safety catch resin, aromatic



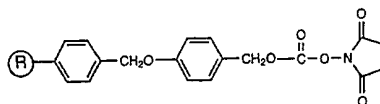
Kenner's safety-catch resin is useful for preparing carboxylic acid derivatives. The resin-substrate bond is stable to most nucleophiles before activation, but becomes susceptible after activation with diazomethane or iodoacetonitrile. Treating the activated resin-substrate with amines or alkoxides generates the corresponding amides and esters. Recently, this resin was used to produce a resin-supported biotinyating reagent.

Backes, B.J.; Ellman, J.A. *J. Am. Chem. Soc.* **1994**, *116*, 11171-11172. Backes, B.J.; Virgilio, A.A.; Ellman, J.A. *J. Am. Chem. Soc.* **1996**, *118*, 3055-3056. Golisade, A.; et al. *Bioorg. Med. Chem. Lett.* **2001**, *11*, 1783-1786.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179; Activation and Cleavage of Safety Catch Resins, page 187.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5755	0.7-1.3	100-200	1%	1 g	35.00
				5 g	140.00

## Succinimidyl carbonate resin



This resin is used in solid phase synthesis to immobilize for amines.

Alsina, J.; et al. *Tetrahedron Lett.* **1997**, *38*, 883-886; Adang, A.E.P.; et al. *Bioorg. Med. Chem. Lett.* **1999**, *9*, 1227-1232.

See Technical Notes: Attaching Amines to Nitrophenyl Carbonate Resin, Succinimidyl Carbonate Resin and Imidazole Carbonate Resin, page 180; Cleavage of Amines from Carbamate Resin, page 189.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5020	0.7-1.5	100-200	1%	1 g	40.00
				5 g	145.00

## TentaGel M NH<sub>2</sub>



TentaGel M NH<sub>2</sub> is similar to TentaGel S NH<sub>2</sub>, but TentaGel M NH<sub>2</sub> consists of microspheres with a narrow size distribution, suitable for the preparation of libraries containing large numbers of components. One gram of TentaGel M NH<sub>2</sub> contains over 45 million beads.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ6035	0.2-0.5	35	1%	1 g	60.00
				5 g	245.00

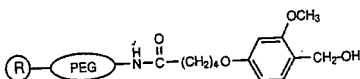
## TentaGel PAP



The PEG linkage on this resin is labile under acid cleavage conditions. The polyethylene glycol linkage remains attached to the substrate to impart more favorable solubility properties. This resin has been utilized in the preparation of antigenic sequences and subsequent immunization without adjuvant.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ6010	0.2-0.5	90	1%	1 g	55.00
				5 g	225.00

## TentaGel S AC

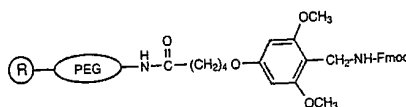


TentaGel S AC resin consists of low cross-linked polystyrene grafted with polyethyleneglycol (PEG) functionalized with HMPB linker at one terminus. This resin combines the acid labile properties of HMPB resin with the swelling properties of TentaGel resins.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Cleavage from HMPB Resin, page 184.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ6001	0.2-0.5	90	1%	1 g	55.00
				5 g	220.00

## TentaGel S AM

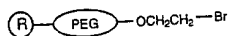


TentaGel S AM resin is low cross-linked polystyrene grafted with polyethyleneglycol (PEG) bearing a PAL linker at the free terminal.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179; Cleavage from PAL Resin, page 184.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ5075	0.2-0.4	90	1%	1 g	55.00
				5 g	220.00

## Tentagel S Br

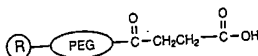


TentaGel resins consist of polyethylene glycol grafted onto polystyrene beads. The polyethylene glycol provides a hydrophilic environment at the reactive sites, which are located on the terminals of the polyethylene glycol chains. TentaGel resins swell in a wide range of solvents, including alcohols and aqueous media, thus permitting a wide range of chemistries. TentaGel S Br resin has applications similar to Merrifield resin.

See Technical Notes: Attachment of Carboxylic Acids to Halogenated Resins, page 177.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ6007	0.2-0.5	90	1%	1 g	30.00
				5 g	120.00
SJ6008	0.2-0.5	130	1%	1 g	35.00
				5 g	130.00

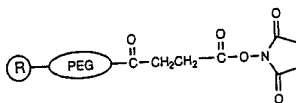
## TentaGel S COOH



TentaGel S COOH resin consists of low-crosslinked polystyrene grafted with polyethyleneglycol (PEG) functionalized with a carboxylic acid group at the free terminal. This resin swells in a wide variety of solvents and has a highly uniform bead size. It is used to anchor alcohols and phenols, which may be coupled to the resin either through carbodiimide-activated coupling or by first forming the reactive resin acid chloride using thionyl chloride or oxalyl chloride.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ6014	0.2-0.4	90	1%	1 g	40.00
				5 g	140.00
SJ6015	0.2-0.4	130	1%	1 g	40.00
				5 g	140.00

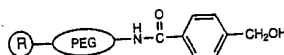
## TentaGel S COOSu



TentaGel S COOSu resin consists of low-crosslinked polystyrene grafted with polyethyleneglycol (PEG) functionalized with activated carboxylate hydroxysuccinimide esters. This resin swells in a wide variety of solvents and has a highly uniform bead size. TentaGel S COOSu is used in solid phase synthesis to anchor alcohols and phenols. Products can be cleaved from the resin by base hydrolysis.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ6090	0.2-0.5	90	1%	1 g	55.00
				5 g	220.00

## TentaGel S HMB

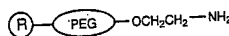


TentaGel S HMB resin consists of low cross-linked polystyrene grafted with polyethyleneglycol (PEG) functionalized with HMBA linker at one terminus.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ6020	0.2-0.5	90	1%	1 g	55.00
				5 g	220.00

## TentaGel S NH<sub>2</sub>



TentaGel S NH<sub>2</sub> resin is low cross-linked polystyrene grafted with polyethyleneglycol (PEG) functionalized with a primary amine at the free terminal. Linkers can be coupled to this resin to provide new resins with unique coupling and cleavage properties.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ6009	0.2-0.5	90	1%	1 g	30.00
				5 g	120.00
SJ6011	0.2-0.5	130	1%	1 g	35.00
				5 g	140.00

## TentaGel S OH

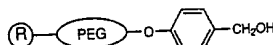


TentaGel S OH resin consists of low-crosslinked polystyrene grafted with polyethyleneglycol (PEG). It is used in organic synthesis to anchor carboxylic acids through an ester bond. Products are released by saponification with dilute aqueous base. Like other TentaGel resins, TentaGel S OH swells in a variety of solvents ranging from toluene to water. The beads have a narrow size distribution, making them well suited for combinatorial libraries.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ6004	0.2-0.5	90	1%	1 g	40.00
				5 g	140.00
SJ6005	0.2-0.5	130	1%	1 g	40.00
				5 g	140.00

## TentaGel S PHB

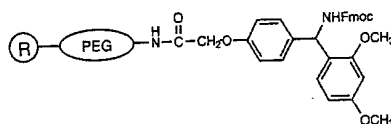


TentaGel S PHB resin consists of low-crosslinked polystyrene grafted with polyethyleneglycol (PEG) functionalized with a Wang linker on the free terminal. This resin combines the acid labile properties of the Wang resin with the swelling properties of TentaGel resins, making it suitable for a wide variety of combinatorial chemistry applications.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Cleavage from Wang Resin, page 183.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ5009	0.2-0.5	90	1%	1 g	30.00
				5 g	120.00

## TentaGel-S RAM Fmoc

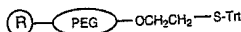


TentaGel S RAM Fmoc resin is low cross-linked polystyrene grafted with polyethyleneglycol (PEG) bearing the Rink linker at the free terminal. This resin is useful for preparing amides and amines.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179; Cleavage from Rink and Knorr Resin, page 184.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ5030	0.2-0.4	90	1%	1 g	55.00
				5 g	220.00

## TentaGel S S-Trt



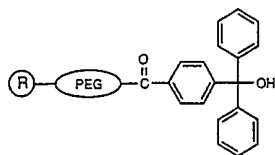
These thiol resin precursors are useful for preparing resin-supported peptide thioesters, which are valuable intermediates for preparing large peptides or small proteins by fragment condensation or native chemical ligation. These resins can also be used in traceless linker strategies.

L. M. Gayo, M. J. Suto, *Tetrahedron Lett.* 38, 211 (1997).

See Technical Notes: TentaGel S S-Trt, page 176.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ6030	0.2-0.4	90	1%	1 g	40.00
				5 g	140.00

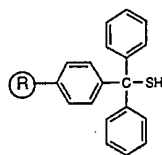
## TentaGel S Trt-OH



TentaGel S Trt-OH resin consists of low-crosslinked polystyrene grafted with polyethyleneglycol (PEG) functionalized with a trityl alcohol linker at the free terminal. TentaGel S Trt-OH resin must be converted to the activated trityl chloride form prior to use.

Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ6012	0.2-0.4	90	1%	1 g	55.00
				5 g	220.00
SJ6135	0.2-0.4	130	1%	1 g	60.00
				5 g	250.00

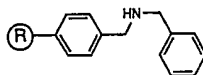
## Thiol trityl resin



Thiol trityl resin has many potential uses, such as preparing thiols, thio acids, mixed disulfides or disulfide linked cyclic compounds.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5030	0.6-1.2	100-200	1%	1 g	55.00
				5 g	220.00

## Traceless Arene resin



This resin reacts with aryl diazonium salts to form triazine-linked aromatic compounds. The triazine linker can be cleaved without leaving any trace on the aryl substrate.

Bräse, S.; Dahmen, S.; Heuts, J. *Tetrahedron Lett.* **1999**, *40*, 6201-6203; Bräse, S.; Schroen, M. *Angew. Chem. Int. Ed. Engl.* **1999**, *38*, 1071-1073; Lormann, M.; Dahmen, S.; Bräse, S. *Tetrahedron Lett.* **2000**, *41*, 3813-3816.

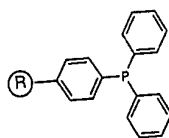
See Technical Notes: Traceless Arene Resin, page 191.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5081	0.5-1.3	100-200	1%	5 g	45.00
				25 g	180.00
				100 g	540.00

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## Triphenylphosphine resin

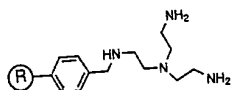


Triphenylphosphine resin has many applications. It can be used as a traceless linker or can be used to prepare polymer supported Wittig reagents, catalysts and organometallic complexes. It can be used in place of triphenylphosphine in solution phase Mitsunobu reactions and recently was used as a capture resin in a new catch-and-release purification method.

Bernard, M.; Ford, W.T. *J. Org. Chem.* **1983**, 48, 326-332; Caldarelli, M.; Habermann, J.; Ley, S.V. *Bioorg. Med. Chem. Lett.* **1999**, 9, 2049-2052; Comely, A.C.; Gibson, S.E.; Hales, N.J. *Chem. Commun.* **1999**, 2075-2076; Comely, A.C.; Gibson, S.E.; Hales, N.J.; Peplow, M.A. *Tetrahedron Lett.* **1999**, 40, 1417-1418; Quagliato, D.A.; Andrae, P.M.; Matelan, E.M. *J. Org. Chem.* **2000**, 65, 5037-5042; Slade, R.M.; Phillips, M.A.; Berger, J.G. *Molecular Diversity* **1998**, 4, 215-219.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5079	0.8-1.6	100-200	1%	5 g	60.00
				25 g	240.00
				100 g	750.00

## Tris(2-aminoethyl)amine resin

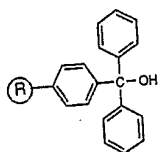


This resin is a very useful scavenger of acids, acid chlorides, aldehydes, isocyanates and isothiocyanates.

Blackburn, C.; Guan, B.; Fleming, P.; Shiosaki, K.; Tsai, S. *Tetrahedron Lett.* **1998**, 39, 3635-3638; Booth, R.J.; Hodges, J.C. *J. Am. Chem. Soc.* **1997**, 119, 4882-4886; Kim, K.; Le, K. *Synlett* **1999**, 1957-1959; McComas, W.; Chen, L.; Kim, K. *Tetrahedron Lett.* **2000**, 41, 3573-3576; Nicewonger, R.B.; Ditto, L.; Varady, L. *Tetrahedron Lett.* **2000**, 41, 2323-2326; South, M.S.; Dice, T.A.; Parlow, J.J. *Biotech. Bioeng. (Combin. Chem.)* **2000**, 71, 51-57; Yun, Y.K.; Leung, S.S.W.; Porco, J.A., Jr. *Biotech. Bioeng. (Combin. Chem.)* **2000**, 71, 9-18.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5033	0.6-1.0	100-200	1%	5 g	40.00
				25 g	165.00
				100 g	495.00

## Trityl alcohol resin



Trityl alcohol resin is stable and can be readily converted to the activated trityl chloride resin.

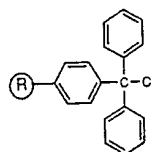
See Technical Notes: Activation of Trityl Alcohol Resins, page 177.

For an application of this resin, see Yan, B.; Sun, Q. *J. Org. Chem.* **1998**, 63, 55-58.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5095	1.0-2.0	100-200	1%	1 g	20.00
				5 g	75.00
				25 g	300.00

RESINS

## Trityl chloride resin



Trityl chloride resin can be used as a support for alcohols, phenols, carboxylic acids and imidazoles.

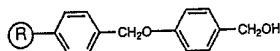
Garibay, P.; et al. *Tetrahedron Lett.* **1998**, 39, 2207-2210; Li, Z.; Ganesan, A. *Synlett* **1998**, 405-406; Pernerstorfer, J.; et al. *Synthesis* **1999**, 138-144; Sabatino, G.; et al. *Tetrahedron Lett.* **1999**, 40, 809-812; Shankar, B.B.; et al. *Tetrahedron Lett.* **1998**, 39, 2447-2448; Takahashi, T.; et al. *Tetrahedron Lett.* **1998**, 39, 1369-1372.

Extremely Moisture Sensitive. Store refrigerated in a desiccator or under inert atmosphere. We recommend re-activating this resin before use to obtain reported activity.

See Technical Notes: Attachment of Alcohols and Phenols to Trityl Chloride Resins, page 178; Attachment of Carboxylic Acids to Trityl Chloride Resins, page 179; Attachment of Amines to Trityl Chloride Resins, page 180; Cleave Acids from Trityl Resins, page 185; Cleave Alcohols and Phenols from Trityl Resins, page 185; Cleave Amines from Trityl Resins, page 185.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SC5029	1.0-2.0	75-100	1%	1 g	25.00
				5 g	100.00
				25 g	395.00
SC5028	1.0-2.0	100-200	1%	1 g	15.00
				5 g	50.00
				25 g	200.00

## Wang resin



Wang resin is an acid labile, highly versatile solid phase synthesis support for acids, alcohols, and phenols. Originally developed for peptide synthesis, Wang resin is now widely used in solid phase organic synthesis.

Wang, S. *J. Am. Chem. Soc.* **1973**, 95, 1328-1333;

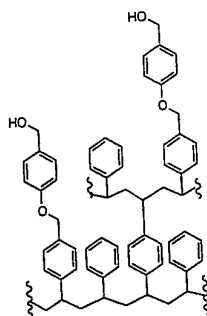
For some recent applications of Wang resin, see Attardi, M. E.; Taddei, M. *Tetrahedron Lett.* **2001**, 42, 3519-3522; Carde, L.; et al. *Tetrahedron Lett.* **2001**, 42, 3299-3302; Takaya, H.; Murahashi, S.-I. *Synlett* **2001**, 991-994.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178; Mitsunobu Coupling to Hydroxy-Substituted Resins, page 178; Cleavage from Wang Resin, page 183.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5008	0.5-1.3	75-100	1%	5 g	35.00
				25 g	135.00
				100 g	395.00
SA5009	0.5-1.3	100-200	1%	5 g	30.00
				25 g	110.00
				100 g	295.00
SA5110	1.4-3.2	100-200	1%	5 g	60.00
				25 g	240.00
				100 g	720.00
SA5108	0.1-0.4	100-200	1%	5 g	30.00
				25 g	110.00
				100 g	295.00
SA5119	0.5-1.3	200-400	1%	5 g	30.00
				25 g	110.00
				100 g	295.00

See Page 148-150 for Amino Acid Substituted Wang Resins

## ParaMax Wang resin

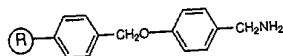


Standard Wang resin typically has a 70:30 mixture of para and meta substituents. ParaMax Wang resin, in contrast, has up to 98% para substituent. The structural homogeneity of ParaMax Wang resin results in more uniform reaction kinetics and easier on-bead spectral monitoring of reactions. Additionally, ParaMax Wang resins exhibit larger swelling factors than standard Merrifield resin, thus improving permeability and allowing faster, more complete reactions.

See Technical Notes: Attachment of Carboxylic Acids to Hydroxy-Substituted Resins, page 178.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5028	0.5-1.3	100-200	1%	5 g	35.00
				25 g	140.00
				100 g	420.00
SA5121	0.5-1.3	200-400	1%	5 g	35.00
				25 g	140.00
				100 g	420.00
SA5023	0.5-1.3	200-400	2%	5 g	35.00
				25 g	140.00
				100 g	420.00
SA5122	1.4-2.4	200-400	1%	5 g	70.00
				25 g	280.00

## Wang Amide resin



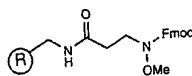
This resin is useful for preparing diverse libraries of secondary amides. Reductive alkylation using aldehydes generates a richer diversity of supported amines than could be prepared from commercially available amines. After acylation, the amide can be cleaved from the resin by oxidation of the linker.

Kobayashi, S.; Aoki, Y. *Tetrahedron Lett.* **1998**, 39, 7345-7348; Aoki, Y.; Kobayashi, S. *J. Comb. Chem.* **1999**, 1, 371-372.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179; Cleavage from Wang Amide Resin, page 185.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5155	0.5-1.3	100-200	1%	1 g	25.00
				5 g	100.00

## Weinreb Amide resin



Solid phase synthesis support used to prepare aldehydes and ketones from carboxylic acids.

Fehrentz, J.-A.; et al. *Tetrahedron Lett.* **1995**, 36, 7871-7874; Dihn, T. Q.; Armstrong, R. W. *Tetrahedron Lett.* **1996**, 37, 1161-1164; Fehrentz, J.A.; et al. *J. Org. Chem.* **1997**, 62, 6792-6796.

See Technical Notes: Attachment of Carboxylic Acids to Amine Substituted Resins, page 179; Cleavage from Weinreb Resin, page 188.

Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SA5765	0.5-1.1	100-200	1%	1 g	35.00
				5 g	140.00

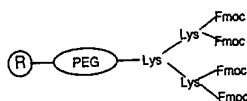
## MAP Resins

Multiple Antigenic Peptides (MAPs) are very useful in antibody production and have potential as safe, synthetic vaccines. Originally developed by Tam, these peptides are produced by synthesizing peptide antigens on a small, branching immunologically inert polylysine core. The resulting peptide has a high molar ratio of antigen to core molecule and induces a strong antibody response. Compared to other methods, MAPs often produce significantly higher titers.

Tam, J.P. *Proc Natl. Acad. Sci. USA* 1988, 85, 540-5413.

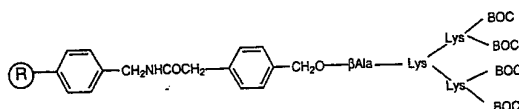
## TentaGel MAP

(Not Cleavable)



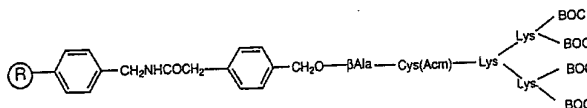
Cat. #	Subs. (mmol/g)	Bead size (μm)	DVB crosslinking	Qty.	US \$
SJ6002	0.4-0.8	90	1%	500 mg 1 g	150.00 275.00

## [Boc-Lys(Boc)]<sub>2</sub>-Lys-β-Ala-PAM resin



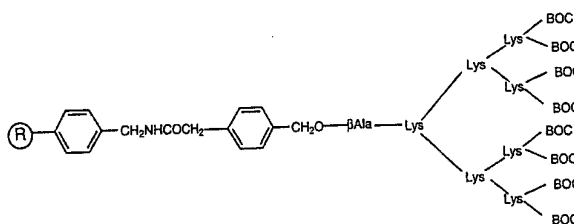
Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SM5606	0.2-0.7	200-400	1%	250 mg 1 g	185.00 550.00

## [Boc-Lys(Boc)]<sub>2</sub>-Lys-Cys(Acm)-β-Ala-PAM resin



Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SM5605	0.2-0.7	200-400	1%	250 mg 1 g	195.00 550.00

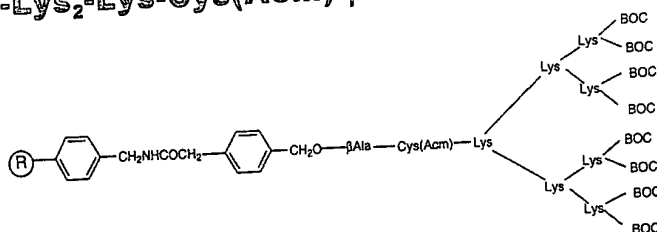
## [Boc-Lys(Boc)]<sub>4</sub>-Lys<sub>2</sub>-Lys-β-Ala-PAM resin



Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SM5602	0.2-0.7	200-400	1%	250 mg 1 g	195.00 595.00

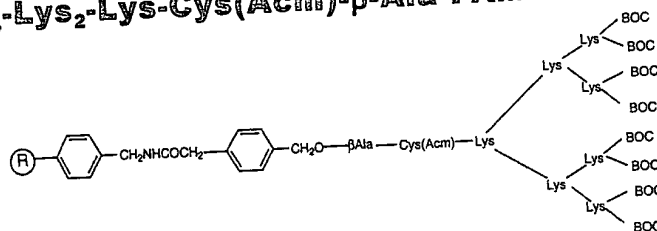
RESINS

# [Boc-Lys(Boc)]<sub>4</sub>-Lys<sub>2</sub>-Lys-Cys(Acm)-β-Ala-PAM resin



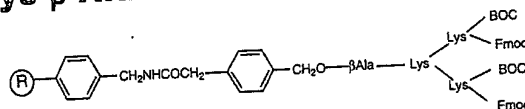
Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SM5603	0.2-0.7	200-400	1%	250 mg 1 g	205.00 625.00

# [Boc-Lys(Boc)]<sub>4</sub>-Lys<sub>2</sub>-Lys-Cys(Acm)-β-Ala-PAM resin



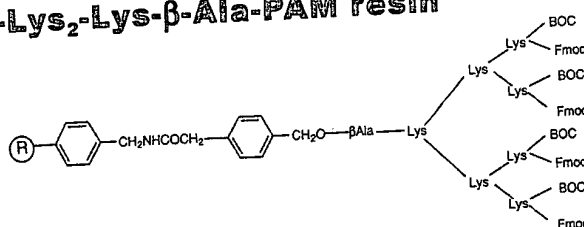
Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SM5613	0.2-0.7	100-200	1%	250 mg 1 g	235.00 695.00

# [Boc-Lys(Fmoc)]<sub>2</sub>-Lys-β-Ala-PAM resin



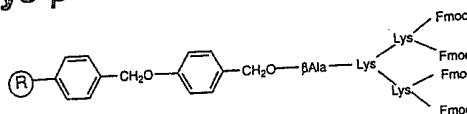
Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SM5608	0.2-0.7	200-400	1%	250 mg 1 g	195.00 595.00

# [Boc-Lys(Fmoc)]<sub>4</sub>-Lys<sub>2</sub>-Lys-β-Ala-PAM resin



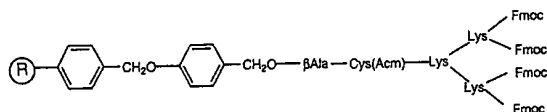
Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SM5604	0.2-0.7	200-400	1%	250 mg 1 g	220.00 660.00

# [Fmoc-Lys(Fmoc)]<sub>2</sub>-Lys-β-Ala-Wang resin



Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SM5106	0.2-0.7	200-400	1%	250 mg 1 g	145.00 435.00

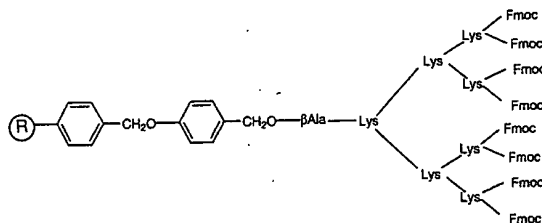
### [Fmoc-Lys(Fmoc)]<sub>2</sub>-Lys-Cys(Acm)-β-Ala-Wang resin



This resin was used to prepare a synthetic vaccine against respiratory syncytial virus, which causes lower respiratory tract illness in infants. Chargelegue, D.; et al. J. Virol. 1998, 72, 2040-2046.

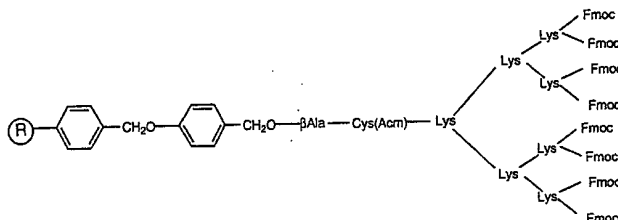
Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SM5105	0.2-0.7	200-400	1%	250 mg 1 g	155.00 475.00

### [Fmoc-Lys(Fmoc)]<sub>4</sub>-Lys<sub>2</sub>-Lys-β-Ala-Wang resin



Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SM5102	0.2-0.7	200-400	1%	250 mg 1 g	175.00 525.00

### [Fmoc-Lys(Fmoc)]<sub>4</sub>-Lys<sub>2</sub>-Lys-Cys(Acm)-β-Ala-Wang resin

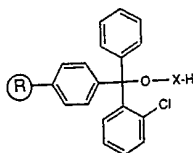


Cat. #	Subs. (mmol/g)	Mesh size	DVB crosslinking	Qty.	US \$
SM5104	0.1-0.5	100-200	1%	250 mg 1 g	195.00 595.00

RESINS

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# Amino Acid 2-Cl-Trt Resins

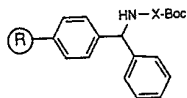


All resins in this list are 100-200 mesh, 1% DVB cross-linked, available in substitutions from 0.5 to 1.4 mmol/g

Cat #	Amino Acid	QTY	US \$	Cat #	Amino Acid	QTY	US \$
SA5900	H-Ala-2-Cl-Trt resin	1 g 5 g	65.00 275.00	SF5960	H-Phe-2-Cl-Trt resin	1 g 5 g	65.00 275.00
SR5907	Arg(Pmc)-2-Cl-Trt resin	1 g 5 g	105.00 435.00	SP5965	H-Pro-2-Cl-Trt resin	1 g 5 g	55.00 220.00
SN5908	H-Asn(Trt)-2-Cl-Trt resin	1 g 5 g	85.00 350.00	SP6965	D-Pro-2-Cl-Trt resin	1 g 5 g	90.00 360.00
SN5909	H-Asn-2-Cl-Trt resin	1 g 5 g	70.00 274.00	SS5970	H-Ser(But)-2-Cl-Trt resin	1 g 5 g	80.00 330.00
SD5910	H-Asp(OBut)-2-Cl-Trt resin	1 g 5 g	80.00 350.00	ST5975	H-Thr(But)-2-Cl-Trt resin	1 g 5 g	80.00 330.00
SC5918	H-Cys(Acm)-2-Cl-Trt resin	1 g 5 g	80.00 330.00	SW5982	Trp(Boc)-2-Cl-Trt resin	1 g 5 g	100.00 400.00
SC5915	H-Cys(Trt)-2-Cl-Trt resin	1 g 5 g	85.00 350.00	SW5980	H-Trp-2-Cl-Trt resin	1 g 5 g	65.00 275.00
SC6915	H-D-Cys(Trt)-2-Cl-Trt resin	1 g 5 g	180.00 720.00	SY5985	H-Tyr(But)-2-Cl-Trt resin	1 g 5 g	80.00 330.00
SQ5926	H-Gln(Trt)-2-Cl-Trt resin	1 g 5 g	80.00 320.00	SV5990	H-Val-2-Cl-Trt resin	1 g 5 g	65.00 275.00
SQ5925	H-Gln-2-Cl-Trt resin	1 g 5 g	70.00 280.00	SU5962	H-Pip-2-Cl-Trt resin	1 g 5 g	170.00 690.00
SE5920	Glu(OBut)-2-Cl-Trt resin	1 g 5 g	80.00 320.00	SU5977	H-Tic-2-Cl-Trt resin	1 g 5 g	175.00 700.00
SG5930	H-Gly-2-Cl-Trt resin	1 g 5 g	65.00 275.00	SA5901	H-Alaninol-2-Cl-Trt resin	1 g 5 g	60.00 240.00
SH5936	H-His(Trt)-2-Cl-Trt resin	1 g 5 g	105.00 420.00	SG5923	Glycinol-2-Cl-Trt resin	1 g 5 g	60.00 240.00
SH6936	D-His(Trt)-2-Cl-Trt resin	1 g 5 g	160.00 640.00	SL5946	Leucinol-2-Cl-Trt resin	1 g 5 g	60.00 240.00
SI5940	H-Ile-2-Cl-Trt resin	1 g 5 g	65.00 275.00	SF5961	Phenylalaninol-2-Cl-Trt resin	1 g 5 g	60.00 240.00
SL5945	H-Leu-2-Cl-Trt resin	1 g 5 g	65.00 275.00	SP5990	Prolinol-2-Cl-Trt resin	1 g 5 g	60.00 240.00
SK5950	H-Lys(Boc)-2-Cl-Trt resin	1 g 5 g	80.00 330.00	ST5976	Threoninol(But)-2-Cl-Trt resin	1 g 5 g	70.00 280.00
SM5955	H-Met-2-Cl-Trt resin	1 g 5 g	65.00 275.00	SV5995	Valinol-2-Cl-Trt resin	1 g 5 g	60.00 240.00

RESINS

## Boc-Amino Acid BHA Resins



All resins in this list are 100-200 mesh, 1% DVB cross-linked, available in substitutions from 0.5 to 1.4 mmol/g

Cat #	Amino Acid	QTY	US \$	Cat #	Amino Acid	QTY	US \$
SA5400	Boc-Ala-BHA resin	1 g 5 g	25.00 100.00	SI5440	Boc-Ile-BHA resin	1 g 5 g	25.00 100.00
SR5407	Boc-Arg(NO <sub>2</sub> )-BHA resin	1 g 5 g	30.00 120.00	SL5445	Boc-Leu-BHA resin	1 g 5 g	25.00 100.00
SR5405	Boc-Arg(Tos)-BHA resin	1 g 5 g	35.00 140.00	SK5450	Boc-Lys(2-Cl-Z)-BHA resin	1 g 5 g	40.00 160.00
SN5410	Boc-Asn-BHA resin	1 g 5 g	30.00 120.00	SP5465	Boc-Pro-BHA resin	1 g 5 g	25.00 100.00
SD5415	Boc-Asp(OBzl)-BHA resin	1 g 5 g	35.00 140.00	SX5468	Boc-Sar-BHA resin	1 g 5 g	35.00 140.00
SD5416	Boc-Asp(OcHx)-BHA resin	1 g 5 g	40.00 160.00	SS5470	Boc-Ser(Bzl)-BHA resin	1 g 5 g	35.00 140.00
SC5420	Boc-Cys(4-MeOBzl)-BHA resin	1 g 5 g	30.00 120.00	ST5475	Boc-Thr(Bzl)-BHA resin	1 g 5 g	35.00 140.00
SE5430	Boc-Glu(OBzl)-BHA resin	1 g 5 g	35.00 140.00	SW5480	Boc-Trp-BHA resin	1g 5 g	25.00 100.00
SE5431	Boc-Glu(OcHx)-BHA resin	1 g 5 g	35.00 140.00	SY5486	Boc-Tyr(2-Br-Z)-BHA resin	1 g 5 g	40.00 160.00
SQ5425	Boc-Gln-BHA resin	1 g 5 g	30.00 120.00	SV5490	Boc-Val-BHA resin	1 g 5 g	25.00 100.00
SG5435	Boc-Gly-BHA resin	1 g 5 g	25.00 100.00				

RESINS

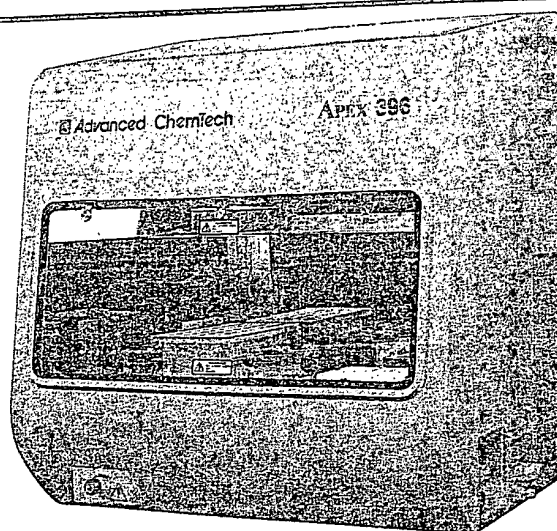
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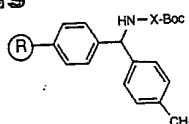
# APEX 396

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- Isolated reactors
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- Low cost synthesis



### Boc-Amino Acid MBHA Resins



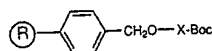
All resins in this list are 100-200 mesh, 1% DVB cross-linked, available in substitutions from 0.5 to 1.4 mmol/g

Cat #	Amino Acid	QTY	US \$
SA5500	Boc-Ala-MBHA resin	1 g	25.00
		5 g	100.00
SR5507	Boc-Arg(NO <sub>2</sub> )-MBHA resin	1 g	30.00
		5 g	120.00
SR5505	Boc-Arg(Tos)-MBHA resin	1 g	35.00
		5 g	140.00
SN5510	Boc-Asn-MBHA resin	1 g	25.00
		5 g	100.00
SD5515	Boc-Asp(OBzl)-MBHA resin	1 g	35.00
		5 g	140.00
SD5516	Boc-Asp(Ochx)-MBHA resin	1 g	35.00
		5 g	140.00
SC5520	Boc-Cys(4-MeOBzl)-MBHA resin	1 g	30.00
		5 g	120.00
SC5525	Boc-Cys(4-MeBzl)-MBHA resin	1 g	30.00
		5 g	120.00
SQ5525	Boc-Gln-MBHA resin	1 g	25.00
		5 g	100.00
SG5535	Boc-Gly-MBHA resin	1 g	25.00
		5 g	100.00
SI5540	Boc-Ile-MBHA resin	1 g	25.00
		5 g	100.00
SL5545	Boc-Leu-MBHA resin	1 g	25.00
		5 g	100.00

Cat #	Amino Acid	QTY	US \$
SK5550	Boc-Lys(2-Cl-Z)-MBHA resin	1 g	40.00
		5 g	160.00
SM5555	Boc-Met-MBHA resin	1 g	25.00
		5 g	100.00
SM5556	Boc-Met(O)-MBHA resin	1 g	35.00
		5 g	140.00
SF5560	Boc-Phe-MBHA resin	1 g	25.00
		5 g	100.00
SP5565	Boc-Pro-MBHA resin	1 g	25.00
		5 g	100.00
SX5568	Boc-Sar-MBHA resin	1 g	30.00
		5 g	120.00
SS5570	Boc-Ser(Bzl)-MBHA resin	1 g	35.00
		5 g	140.00
ST5575	Boc-Thr(Bzl)-MBHA resin	1 g	35.00
		5 g	140.00
SY5586	Boc-Tyr(2-Br-Z)-MBHA resin	1 g	35.00
		5 g	140.00
SW5580	Boc-Trp-MBHA resin	1 g	25.00
		5 g	100.00
SV5590	Boc-Val-MBHA resin	1 g	25.00
		5 g	100.00

RESINS

# Boc-Amino Acid Merrifield Resins



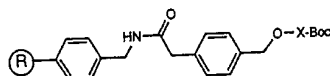
All resins in this list are 100-200 mesh, 1% DVB cross-linked, available in substitutions from 0.5 to 1.4 mmol/g

Cat #	Amino Acid	QTY	US \$	Cat #	Amino Acid	QTY	US \$
SA5200	Boc-Ala-Merrifield resin	5 g 25 g	36.00 145.00	SE5231	Boc-Glu(OcHx)- Merrifield resin	5 g 25 g	60.00 240.00
SA5300	Boc-D-Ala-Merrifield resin	1 g 5 g	25.00 95.00	SG5239	Boc-Gly-Merrifield resin	5 g 25 g	35.00 140.00
SR5207	Boc-Arg(NO <sub>2</sub> )- Merrifield resin	1 g 5 g	20.00 75.00	SH5238	Boc-His(Dnp)- Merrifield resin	5 g 25 g	60.00 240.00
SR5205	Boc-Arg(Tos)- Merrifield resin	1 g 5 g 25 g	15.00 60.00 240.00	SH5237	Boc-His(Tos)- Merrifield resin	5 g 25 g	50.00 190.00
SR5305	Boc-D-Arg(Tos)- Merrifield resin	1 g 5 g	45.00 180.00	SH5348	Boc-D-His(Tos)- Merrifield resin	1 g 5 g	70.00 280.00
SN5210	Boc-Asn-Merrifield resin	5 g 25 g	60.00 240.00	SI5240	Boc-Ile-Merrifield resin	5 g 25 g	40.00 160.00
SN5310	Boc-D-Asn-Merrifield resin	1 g 5 g	50.00 195.00	SL5245	Boc-Leu-Merrifield resin	5 g 25 g	35.00 140.00
SD5215	Boc-Asp(OBzl)- Merrifield resin	5 g 25 g	45.00 180.00	SL5345	Boc-D-Leu-Merrifield resin	1 g 5 g	35.00 140.00
SD5315	Boc-D-Asp(OBzl)- Merrifield resin	1 g 5 g	40.00 160.00	SK5252	Boc-Lys(Fmoc)- Merrifield resin	5 g 25 g	55.00 220.00
SD5216	Boc-Asp(OcHx)- Merrifield resin	5 g 25 g	50.00 195.00	SK5250	Boc-Lys(2-Cl-Z)- Merrifield resin	5 g 25 g	45.00 180.00
SC5222	Boc-Cys(Acm)- Merrifield resin	5 g 25 g	45.00 175.00	SK5350	Boc-D-Lys(2-Cl-Z)- Merrifield resin	1 g 5 g	45.00 180.00
SC5220	Boc-Cys(4-MeOBzl)- Merrifield resin	5 g 25 g	50.00 195.00	SM5255	Boc-Met-Merrifield resin	5 g 25 g	35.00 140.00
SC5221	Boc-Cys(4-MeBzl)- Merrifield resin	5 g 25 g	45.00 170.00	SM5355	Boc-D-Met-Merrifield resin	1 g 5 g	40.00 160.00
SC5321	Boc-D-Cys(4-MeBzl)- Merrifield resin	1 g 5 g	55.00 220.00	SF5260	Boc-Phe-Merrifield resin	5 g 25 g	35.00 140.00
SQ5225	Boc-Gln-Merrifield resin	5 g 25 g	60.00 240.00	SF5360	Boc-D-Phe-Merrifield resin	1 g 5 g	25.00 95.00
SQ5325	Boc-D-Gln-Merrifield resin	1 g 5 g	50.00 160.00	SP5265	Boc-Pro-Merrifield resin	5 g 25 g	35.00 140.00
SE5230	Boc-Glu(OBzl)- Merrifield resin	5 g 25 g	40.00 160.00	SP5365	Boc-D-Pro-Merrifield resin	1 g 5 g	30.00 120.00
SE5330	Boc-D-Glu(OBzl)- Merrifield resin	1 g 5 g	35.00 140.00	SS5270	Boc-Ser(Bzl)- Merrifield resin	5 g 25 g	45.00 180.00
				SS5370	Boc-D-Ser(Bzl)- Merrifield resin	1 g 5 g	45.00 180.00

## Boc-Amino Acid Merrifield Resins (cont.)

Cat #	Amino Acid	QTY	US \$	Cat #	Amino Acid	QTY	US \$
ST5275	Boc-Thr(Bzl)-Merrifield resin	5 g 25 g	45.00 180.00	SY5286	Boc-Tyr(2-Br-Z)-Merrifield resin	5 g 25 g	50.00 195.00
ST5375	Boc-D-Thr(Bzl)-Merrifield resin	1 g 5 g	45.00 180.00	SY5386	Boc-D-Tyr(2-Br-Z)-Merrifield resin	1 g 5 g	60.00 240.00
SU5395	Boc-Tic-Merrifield resin	5 g 25 g	115.00 460.00	SY5285	Boc-Tyr(2,6-Cl <sub>2</sub> Bzl)-Merrifield resin	5 g 25 g	50.00 195.00
SW5280	Boc-Trp-Merrifield resin	5 g 25 g	40.00 160.00	SV5290	Boc-Val-Merrifield resin	5 g 25 g	40.00 160.00
SW5380	Boc-D-Trp-Merrifield resin	1 g 5 g	20.00 80.00	SV5390	Boc-D-Val-Merrifield resin	1 g 5 g	20.00 80.00
SW5281	Boc-Trp(CHO)-Merrifield resin	5 g 25 g	54.00 215.00				

## Boc-Amino Acid PAM Resins



All resins in this list are 100-200 mesh, 1% DVB cross-linked, available in substitutions from 0.5 to 1.4 mmol/g

Cat #	Amino Acid	QTY	US \$	Cat #	Amino Acid	QTY	US \$
SA5600	Boc-Ala-PAM resin	1 g 5 g	30.00 90.00	SD5616	Boc-Asp(OcHx)-PAM resin	1 g 5 g	40.00 120.00
SA5700	Boc-D-Ala-PAM resin	1 g 5 g	80.00 325.00	SC5622	Boc-Cys(Acm)-PAM resin	1 g 5 g	55.00 215.00
SA5601	Boc-β-Ala-PAM resin	1 g 5 g	55.00 220.00	SC5621	Boc-Cys(4-MeOBzl)-PAM resin	1 g 5 g	30.00 90.00
SR5606	Boc-Arg(Mts)-PAM resin	1 g 5 g	80.00 325.00	SC5620	Boc-Cys(4-MeBzl)-PAM resin	1 g 5 g	30.00 90.00
SR5605	Boc-Arg(Tos)-PAM resin	1 g 5 g	27.00 105.00	SC5720	Boc-D-Cys(4-MeBzl)-PAM resin	1 g 5 g	130.00 325.00
SR5705	Boc-D-Arg(Tos)-PAM resin	1 g 5 g	115.00 455.00	SE5630	Boc-Glu(OBzl)-PAM resin	1 g 5 g	35.00 100.00
SN5610	Boc-Asn-PAM resin	1 g 5 g	35.00 100.00	SE5730	Boc-D-Glu(OBzl)	1 g 5 g	130.00 525.00
SN5710	Boc-D-Asn-PAM resin	1 g 5 g	95.00 380.00	SE5631	Boc-Glu(OcHx)	1 g 5 g	60.00 240.00
SD5615	Boc-Asp(OBzl)-PAM resin	1 g 5 g	35.00 100.00	SQ5625	Boc-Gln-PAM resin	1 g 5 g	35.00 100.00
SD5715	Boc-D-Asp(OBzl)-PAM resin	1 g 5 g	115.00 455.00	SQ5725	Boc-D-Gln-PAM resin	1 g 5 g	115.00 455.00

## Boc-Amino Acid PAM Resins (cont.)

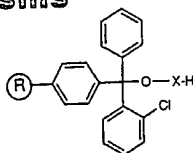
Cat #	Amino Acid	QTY	US \$	Cat #	Amino Acid	QTY	US \$
SG5635	Boc-Gly-PAM resin	1 g 5 g	30.00 90.00	SP5665	Boc-Pro-PAM resin	1 g 5 g	30.00 90.00
SH5638	Boc-His(Dnp)-PAM resin	1 g 5 g	70.00 280.00	SP5765	Boc-D-Pro-PAM resin	1 g 5 g	90.00 375.00
SH5637	Boc-His(Tos)-PAM resin	1 g 5 g	60.00 240.00	SS5670	Boc-Ser(Bzl)-PAM resin	1 g 5 g	35.00 100.00
SI5640	Boc-Ile-PAM resin	1 g 5 g	30.00 90.00	SS5770	Boc-D-Ser(Bzl)-PAM resin	1 g 5 g	105.00 425.00
SL5645	Boc-Leu-PAM resin	1 g 5 g	30.00 90.00	ST5675	Boc-Thr(Bzl)-PAM resin	1 g 5 g	35.00 105.00
SL5745	Boc-D-Leu-PAM resin	1 g 5 g	80.00 325.00	ST5775	Boc-D-Thr(Bzl)-PAM resin	1 g 5 g	105.00 425.00
SK5650	Boc-Lys(2-Cl-Z)-PAM resin	1 g 5 g	35.00 100.00	SU5695	Boc-Tic-PAM resin	1 g 5 g	130.00 535.00
SK5750	Boc-D-Lys(2-Cl-Z)-PAM resin	1 g 5 g	115.00 455.00	SW5680	Boc-Trp-PAM resin	1 g 5 g	30.00 100.00
SK5651	Boc-Lys(Fmoc)-PAM resin	1 g 5 g	50.00 160.00	SW5780	Boc-D-Trp-PAM resin	1 g 5 g	80.00 320.00
SM5655	Boc-Met-PAM resin	1 g 5 g	30.00 90.00	SW5681	Boc-Trp(CHO)-PAM resin	1 g 5 g	45.00 125.00
SM5755	Boc-D-Met-PAM resin	1 g 5 g	115.00 455.00	SY5686	Boc-Tyr(2-Br-Z)-PAM resin	1 g 5 g	40.00 120.00
SM5656	Boc-Met(O)-PAM resin	1 g 5 g	40.00 100.00	SY5786	Boc-D-Tyr(2-Br-Z)-PAM resin	1 g 5 g	135.00 520.00
SL5659	Boc-Nle-PAM resin	1 g 5 g	65.00 260.00	SY5662	Boc-Tyr(2,6-C <sub>12</sub> Bzl)-PAM resin	1 g 5 g	50.00 160.00
SO5658	Boc-Orn(Z)-PAM resin	1 g 5 g	45.00 135.00	SV5690	Boc-Val-PAM resin	1 g 5 g	30.00 90.00
SF5660	Boc-Phe-PAM resin	1 g 5 g	30.00 90.00	SV5790	Boc-D-Val-PAM resin	1 g 5 g	80.00 240.00
SF5760	Boc-D-Phe-PAM resin	1 g 5 g	90.00 375.00				

RESINS

Advanced ChemTech Offers an  
Extensive Selection of Amino Acids  
& Amino Acid Derivatives

See Pages 1-104

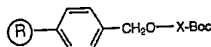
## Fmoc-Amino Acid 2-Cl-Trt resins



All resins in this list are 100-200 mesh, 1% DVB cross-linked, available in substitutions from 0.5-1.1 mmol/g

Cat #	Amino Acid	QTY	US \$	Cat #	Amino Acid	QTY	US \$
SA5910	Fmoc-Ala-2-Cl-Trt resin	1 g 5 g	60.00 240.00	SI6140	Fmoc-Ile-2-Cl-Trt resin	1 g 5 g	60.00 240.00
SD5192	Fmoc-Asp(But)-2-Cl-Trt resin	1 g 5 g	75.00 300.00	SL5940	Fmoc-Leu-2-Cl-Trt resin	1 g 5 g	60.00 240.00
SD5193	Fmoc-Asp(OBzl)-2-Cl-Trt resin	1 g 5 g	75.00 300.00	SK5990	Fmoc-Lys(Boc)-2-Cl-Trt resin	1 g 5 g	75.00 300.00
SR6135	Fmoc-Arg(Pmc)-2-Cl-Trt resin	1 g 5 g	100.00 400.00	SM5980	Fmoc-Met-2-Cl-Trt resin	1 g 5 g	60.00 240.00
SR6136	Fmoc-Arg(Pbf)-2-Cl-Trt resin	1 g 5 g	90.00 360.00	SF6102	Fmoc-Phe-2-Cl-Trt resin	1 g 5 g	60.00 240.00
SN6208	Fmoc-Asn(Trt)-2-Cl-Trt resin	1 g 5 g	80.00 320.00	SP5225	Fmoc-Pro-2-Cl-Trt resin	1 g 5 g	60.00 240.00
SC6218	Fmoc-Cys(Trt)-2-Cl-Trt resin	1 g 5 g	80.00 320.00	SS6106	Fmoc-Ser(But)-2-Cl-Trt resin	1 g 5 g	75.00 300.00
SQ5951	Fmoc-Gln(Trt)-2-Cl-Trt resin	1 g 5 g	75.00 300.00	ST6515	Fmoc-Thr(But)-2-Cl-Trt resin	1 g 5 g	75.00 300.00
SE6125	Fmoc-Glu(OBut)-2-Cl-Trt resin	1 g 5 g	75.00 300.00	ST6110	Fmoc-Thr(Bzl)-2-Cl-Trt resin	1 g 5 g	75.00 300.00
SE5935	Fmoc-Glu(OBzl)-2-Cl-Trt resin	1 g 5 g	75.00 300.00	SW5940	Fmoc-Trp(Boc)-2-Cl-Trt resin	1 g 5 g	95.00 380.00
SG5931	Fmoc-Gly-2-Cl-Trt resin	1 g 5 g	60.00 240.00	SY5420	Fmoc-Tyr(But)-2-Cl-Trt resin	1 g 5 g	75.00 300.00
SH5960	Fmoc-His(Trt)-2-Cl-Trt resin	1 g 5 g	100.00 400.00	SV5915	Fmoc-Val-2-Cl-Trt resin	1 g 5 g	60.00 240.00

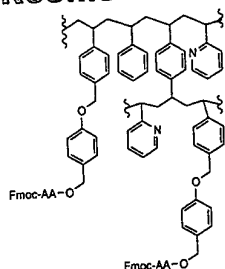
## Fmoc-Amino Acid Merrifield Resins



All resins in this list are 100-200 mesh, 1% DVB cross-linked, available in substitutions from 0.5 to 1.4 mmol/g

Cat #	Amino Acid	QTY	US \$	Cat #	Amino Acid	QTY	US \$
SR5110	Fmoc-Arg(Pbf)-Merrifield resin	1 g 5 g	25.00 100.00	SK5110	Fmoc-Lys(Boc)-Merrifield resin	1 g 5 g	25.00 100.00
SD5115	Fmoc-Asp(OBut)-Merrifield resin	1 g 5 g	25.00 100.00	SS5110	Fmoc-Ser(But)-Merrifield resin	1 g 5 g	25.00 100.00
SN5110	Fmoc-Asn(Trt)-Merrifield resin	1 g 5 g	25.00 100.00	SY5110	Fmoc-Tyr(But)-Merrifield resin	1 g 5 g	25.00 100.00

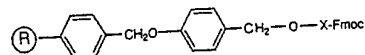
## Fmoc-Amino Acid 2-Pyridine-co-Wang Resins



All resins in this list are 100-200 mesh, 1% DVB cross-linked, available in substitutions from 0.5 to 1.4 mmol/g

Cat #	Amino Acid	QTY	US \$
SA5790	Fmoc-Ala-2-Pyridine-co-Wang resin	1 g 5 g	55.00 225.00
SR5780	Fmoc-Arg(Pmc)-2-Pyridine-co-Wang resin	1 g 5 g	115.00 465.00
SD5780	Fmoc-Asp(OBut)-2-Pyridine-co-Wang resin	1 g 5 g	80.00 315.00
SN5780	Fmoc-Asn(Trt)-2-Pyridine-co-Wang resin	1 g 5 g	90.00 360.00
SC5780	Fmoc-Cys(Trt)-2-Pyridine-co-Wang resin	1 g 5 g	85.00 330.00
SE5780	Fmoc-Glu(OBut)-2-Pyridine-co-Wang resin	1 g 5 g	80.00 315.00
SE5790	Fmoc-Glu(OMe)-2-Pyridine-co-Wang resin	1 g 5 g	110.00 450.00
SQ5780	Fmoc-Gln(Trt)-2-Pyridine-co-Wang resin	1 g 5 g	90.00 360.00
SG5780	Fmoc-Gly-2-Pyridine-co-Wang resin	1 g 5 g	55.00 225.00
SH5780	Fmoc-His(Trt)-2-Pyridine-co-Wang resin	1 g 5 g	90.00 360.00
SI5780	Fmoc-Ile-2-Pyridine-co-Wang resin	1 g 5 g	55.00 225.00
SL5780	Fmoc-Leu-2-Pyridine-co-Wang resin	1 g 5 g	55.00 225.00
SK5780	Fmoc-Lys(Boc)-2-Pyridine-co-Wang resin	1 g 5 g	70.00 285.00
SM5780	Fmoc-Met-2-Pyridine-co-Wang resin	1 g 5 g	55.00 225.00
SF5780	Fmoc-Phe-2-Pyridine-co-Wang resin	1 g 5 g	55.00 225.00
SP5780	Fmoc-Pro-2-Pyridine-co-Wang resin	1 g 5 g	55.00 225.00
SS5780	Fmoc-Ser(But)-2-Pyridine-co-Wang resin	1 g 5 g	75.00 300.00
ST5780	Fmoc-Thr(But)-2-Pyridine-co-Wang resin	1 g 5 g	80.00 315.00
SW5790	Fmoc-Trp(Boc)-2-Pyridine-co-Wang resin	1 g 5 g	90.00 360.00
SY5780	Fmoc-Tyr(But)-2-Pyridine-co-Wang resin	1 g 5 g	80.00 315.00
SV5780	Fmoc-Val-2-Pyridine-co-Wang resin	1 g 5 g	55.00 225.00

## Fmoc-Amino Acid Wang Resins (75-100 mesh)

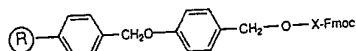


All resins in this list are 75-100 mesh, 1% DVB cross-linked, available in substitutions from 0.5 to 1.4 mmol/g

Cat #	Amino Acid	QTY	US \$
SX5151	Fmoc-Amb-Wang resin	1 g 5 g	95.00 380.00
SX5150	Fmoc-Amc-Wang resin	1 g 5 g	95.00 380.00
SA5159	Fmoc-Ala-Wang resin	1 g 5 g	35.00 140.00
SD5159	Fmoc-Asp(OBut)-Wang resin	1 g 5 g	50.00 200.00
SR5159	Fmoc-Arg(Pmc)-Wang resin	1 g 5 g	95.00 380.00
SC5159	Fmoc-Cys(Trt)-Wang resin	1 g 5 g	80.00 320.00
SQ5159	Fmoc-Gln(Trt)-Wang resin	1 g 5 g	90.00 360.00
SE5159	Fmoc-Glu(OBut)-Wang resin	1 g 5 g	50.00 200.00
SE5158	Fmoc-Glu(OMe)-Wang resin	1 g 5 g	95.00 380.00
SG5159	Fmoc-Gly-Wang resin	1 g 5 g	35.00 140.00
SH5159	Fmoc-His(Trt)-Wang resin	1 g 5 g	110.00 440.00
SI5159	Fmoc-Ile-Wang resin	1 g 5 g	35.00 140.00
SL5157	Fmoc-Leu-Wang resin	1 g 5 g	35.00 140.00
SK5159	Fmoc-Lys(Boc)-Wang resin	1 g 5 g	35.00 140.00
SM5159	Fmoc-Met-Wang resin	1 g 5 g	35.00 140.00
SF5159	Fmoc-Phe-Wang resin	1 g 5 g	35.00 140.00
SP5159	Fmoc-Pro-Wang resin	1 g 5 g	35.00 140.00
SS5159	Fmoc-Ser(But)-Wang resin	1 g 5 g	65.00 260.00
ST5159	Fmoc-Thr(But)-Wang resin	1 g 5 g	65.00 260.00
SW5159	Fmoc-Trp(Boc)-Wang resin	1 g 5 g	110.00 440.00
SY5159	Fmoc-Tyr(But)-Wang resin	1 g 5 g	50.00 200.00
SV5159	Fmoc-Val-Wang resin	1 g 5 g	35.00 140.00

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# Fmoc-Amino Acid Wang Resins (100-200 mesh)



All resins in this list are 100-200 mesh, 1% DVB cross-linked, available in substitutions from 0.5 to 1.4 mmol/g

Cat #	Amino Acid	QTY	US \$	Cat #	Amino Acid	QTY	US \$
SU5123	Fmoc-2-Abu-Wang resin	1 g 5 g	50.00 190.00	SC5115	Fmoc-Cys(Acm)-Wang resin	1 g 5 g	50.00 200.00
SU5129	Fmoc-Ahx-Wang resin	1 g 5 g	45.00 190.00	SC5117	Fmoc-Cys(But)-Wang resin	1 g 5 g	40.00 160.00
SU5139	Fmoc-Alb-Wang resin (200-400 mesh)	1 g 5 g	51.00 205.00	SC5121	Fmoc-Cys(4-MeBzl)- Wang resin	1 g 5 g	50.00 190.00
SA5100	Fmoc-Ala-Wang resin	1 g 5 g	22.00 85.00	SC5122	Fmoc-Cys(4-MeOBzl)- Wang resin	1 g 5 g	35.00 140.00
SA6100	Fmoc-D-Ala-Wang resin	1 g 5 g	55.00 220.00	SC5118	Fmoc-Cys(Trt)-Wang resin	1 g 5 g	60.00 240.00
SA5101	Fmoc-β-Ala-Wang resin	1 g 5 g	35.00 140.00	SC6118	Fmoc-D-Cys(Trt)-Wang resin	1 g 5 g	140.00 560.00
SR5106	Fmoc-Arg(Tos)-Wang resin	1 g 5 g	85.00 340.00	SU5111	Fmoc-Boc-Dpr(Fmoc)- Wang resin	1 g 5 g	155.00 620.00
SR5107	Fmoc-Arg(Pmc)-Wang resin	1 g 5 g	80.00 320.00	SU5124	Fmoc-Dpr(Boc)-Wang resin	1 g 5 g	165.00 720.00
SR5109	Fmoc-Arg(Pbf)-Wang resin	1 g 5 g	75.00 300.00	SQ5125	Fmoc-Gln-Wang resin	1 g 5 g	23.00 90.00
SR6109	Fmoc-D-Arg(Pbf)-Wang resin	1 g 5 g	135.00 540.00	SQ5126	Fmoc-Gln(Trt)-Wang resin	1 g 5 g	75.00 295.00
SN5108	Fmoc-Asn(Trt)-Wang resin	1 g 5 g	60.00 240.00	SE5120	Fmoc-Glu(Obut)-Wang resin	1 g 5 g	40.00 125.00
SN6108	Fmoc-D-Asn(Trt)-Wang resin	1 g 5 g	125.00 500.00	SE6120	Fmoc-D-Glu(Obut)-Wang resin	1 g 5 g	125.00 500.00
SD5112	Fmoc-Asp-Wang resin	1 g 5 g	40.00 160.00	SG5130	Fmoc-Gly-Wang resin	1 g 5 g	18.00 72.00
SD5110	Fmoc-Asp(Obut)-Wang resin	1 g 5 g	40.00 160.00	SF5166	Fmoc-Hfe-Wang resin	1 g 5 g	100.00 410.00
SD6110	Fmoc-D-Asp(Obut)-Wang resin	1 g 5 g	65.00 260.00	SH5136	Fmoc-His(Trt)-Wang resin	1 g 5 g	50.00 200.00
SU5127	Fmoc-5-Ava-Wang resin	1 g 5 g	71.00 284.00	SH6136	Fmoc-D-His(Trt)-Wang resin	1 g 5 g	140.00 560.00
SU5103	Fmoc-Bip-Wang resin	1 g 5 g	155.00 615.00	SP5167	Fmoc-Hyp(But)-Wang resin	1 g 5 g	75.00 300.00
SP5168	Fmoc-Bpa-Wang resin	1 g 5 g	115.00 460.00	SI5140	Fmoc-Ile-Wang resin	1 g 5 g	18.00 72.00
SA5103	Fmoc-Cha-Wang resin	1 g 5 g	65.00 260.00	SL5145	Fmoc-Leu-Wang resin	1 g 5 g	18.00 72.00
SG5133	Fmoc-Chg-Wang resin	1 g 5 g	65.00 260.00	SL6145	Fmoc-D-Leu-Wang resin	1 g 5 g	75.00 295.00

RESINS

# **Fmoc-Amino Acid Wang Resins (100-200 mesh) (cont).**

Cat #	Amino Acid	QTY	US \$
SK5155	Fmoc-Lys-Wang resin	1 g	90.00
		5 g	360.00
SK5153	Fmoc-Lys(Alloc)-Wang resin	1 g	40.00
		5 g	160.00
SK5154	Fmoc-Lys(Biotin)-Wang resin	1 g	330.00
SK5150	Fmoc-Lys(Boc)-Wang resin	1 g	40.00
		5 g	155.00
SK6150	Fmoc-D-Lys(Boc)-Wang resin	1 g	125.00
		5 g	500.00
SK5156	Fmoc-Lys(Fmoc)-Wang resin	1 g	50.00
		5 g	200.00
SK5151	Fmoc-Boc-Lys(Fmoc)-Wang resin	1 g	50.00
		5 g	215.00
SK5152	Fmoc-Lys(2-Cl-Z)-Wang resin	1 g	55.00
		5 g	220.00
SM5155	Fmoc-Met-Wang resin	1 g	18.00
		5 g	72.00
SM6155	Fmoc-D-Met-Wang resin	1 g	70.00
		5 g	280.00
SA5102	Fmoc-1-Nal-Wang resin	1 g	135.00
		5 g	540.00
SA6102	Fmoc-D-1-Nal-Wang resin	1 g	135.00
		5 g	540.00
SA5104	Fmoc-2-Nal-Wang resin	1 g	155.00
		5 g	620.00
SA6104	Fmoc-D-2-Nal-Wang resin	1 g	155.00
		5 g	620.00
SL5159	Fmoc-Nle-Wang resin	1 g	40.00
		5 g	120.00
SO5164	Fmoc-Orn(Boc)-Wang resin	1 g	100.00
		5 g	395.00
SP5165	Fmoc-Pro-Wang resin	1 g	18.00
		5 g	72.00
SP6165	Fmoc-D-Pro-Wang resin	1 g	75.00
		5 g	295.00
SF5160	Fmoc-Phe-Wang resin	1 g	18.00
		5 g	72.00
SF6160	Fmoc-D-Phe-Wang resin	1 g	85.00
		5 g	340.00
SF6163	Fmoc-D-Phe(4-F)-Wang resin	1 g	115.00
		5 g	460.00

Cat #	Amino Acid	QTY	US \$
SF5170	Fmoc-Phe(4-I)-Wang resin	1 g	105.00
		5 g	420.00
SF5158	Fmoc-Phe(4-NO <sub>2</sub> )-Wang resin	1 g	80.00
		5 g	320.00
SG5134	Fmoc-Phg-Wang resin	1 g	45.00
		5 g	180.00
SG6134	Fmoc-D-Phg-Wang resin	1 g	80.00
		5 g	325.00
SU5163	Fmoc-Pip-Wang resin	1 g	95.00
		5 g	380.00
SS5170	Fmoc-Ser(But)-Wang resin	1 g	40.00
		5 g	160.00
SS6170	Fmoc-D-Ser(But)-Wang resin	1 g	125.00
		5 g	500.00
SG5132	Fmoc-Sar-Wang resin	1 g	36.00
		5 g	144.00
SU5189	Fmoc-Tle-Wang resin	1 g	130.00
		5 g	520.00
ST5175	Fmoc-Thr(But)-Wang resin	1 g	40.00
		5 g	160.00
ST6175	Fmoc-D-Thr(But)-Wang resin	1 g	125.00
		5 g	500.00
SU5187	Fmoc-Tic-Wang resin	1 g	135.00
		5 g	540.00
SU6187	Fmoc-D-Tic-Wang resin	1 g	135.00
		5 g	540.00
SW5180	Fmoc-Trp-Wang resin	1 g	23.00
		5 g	90.00
SW6180	Fmoc-D-Trp-Wang resin	1 g	95.00
		5 g	395.00
SW5181	Fmoc-Trp(Boc)-Wang resin	1 g	85.00
		5 g	340.00
SW6181	Fmoc-D-Trp(Boc)-Wang resin	1 g	120.00
		5 g	480.00
SY5185	Fmoc-Tyr(But)-Wang resin	1 g	40.00
		5 g	160.00
SY6185	Fmoc-D-Tyr(But)-Wang resin	1 g	125.00
		5 g	500.00
SV5190	Fmoc-Val-Wang resin	1 g	18.00
		5 g	72.00
SV6190	Fmoc-D-Val-Wang resin	1 g	80.00
		5 g	325.00

RESINS



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